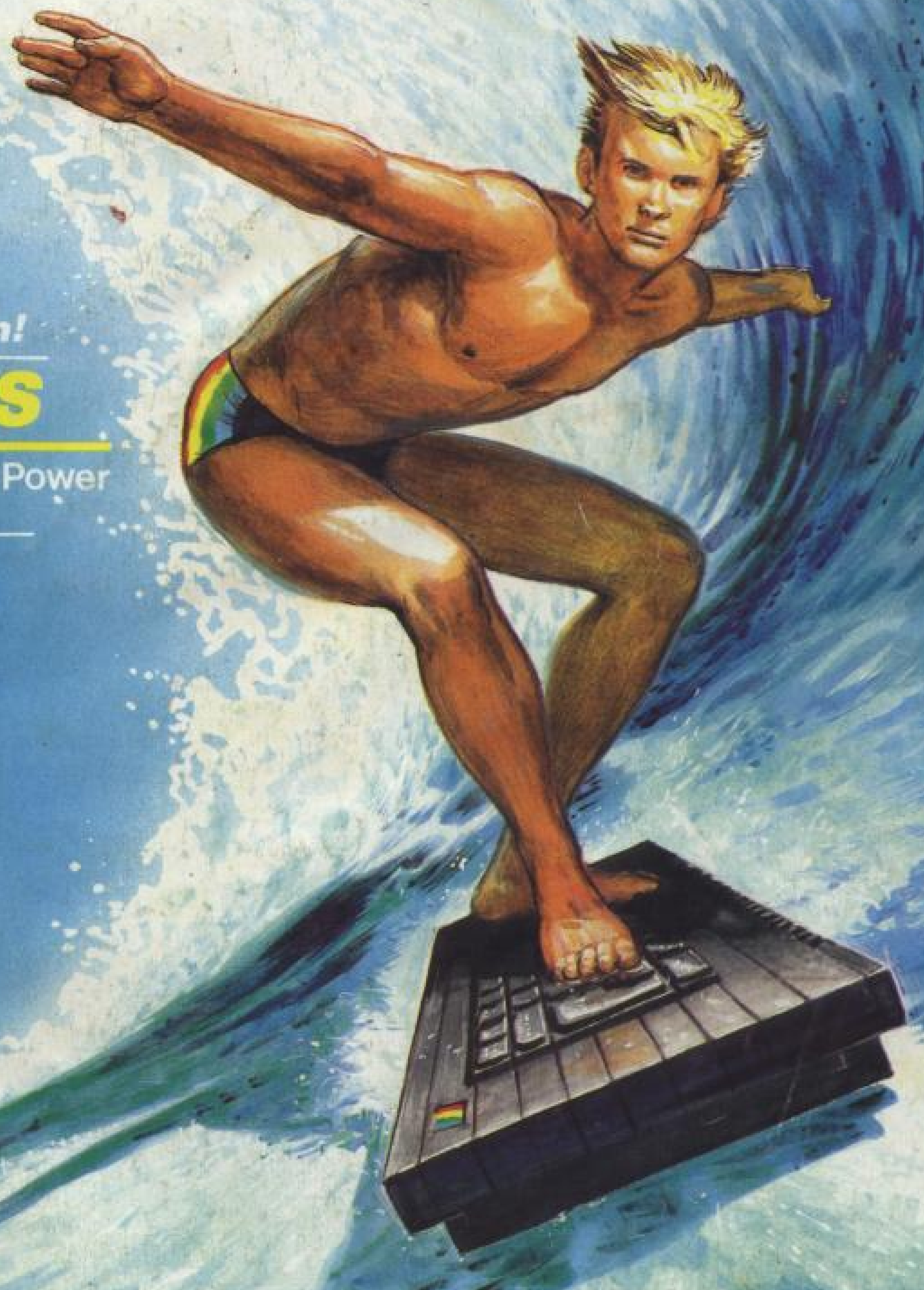
CRASH

A NEWSFIELD PUBLICATION
No. 19 AUGUST 1985
95p

ZX SPECTRUM



At last the 64K Spectrum!

MIKRO-PLUS

16, 48 now 64K of Program Power

MIKRO–GEN

Frankie Comes to Ludlow

And gets a full review...

Super Sub Offer

HALF PRICE HARDWARE!

SPECTRUM

MONTHLY SPECTRUM SOFTWARE REVIEW

Great Pull-Out Poster

Summertime Sports Software Scene

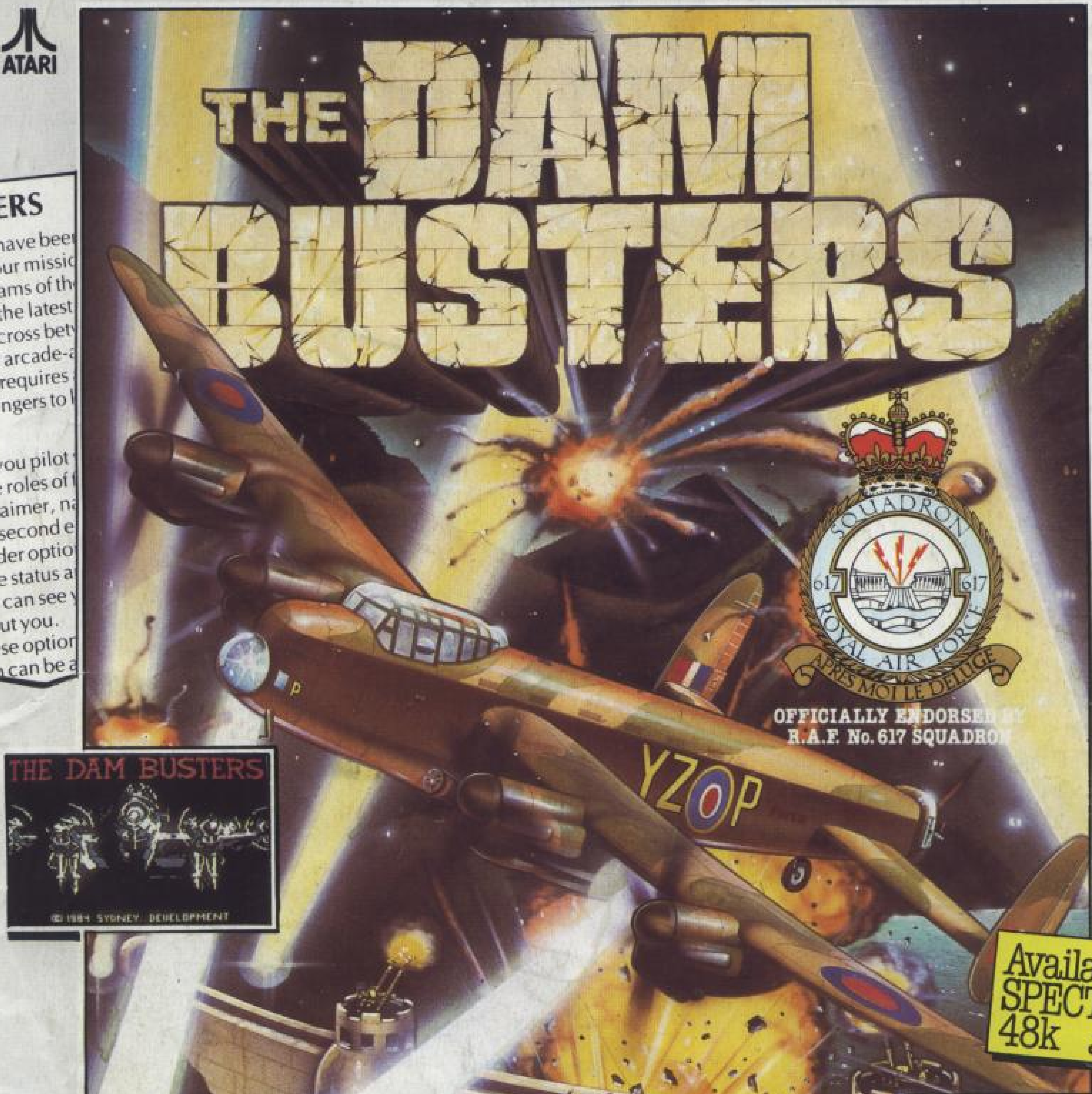
Grab a piece of the action!

OLIVER FREY

Play THE GAME everyone's talking about:

ATARI

64



Available for SPECTRUM 48k £9·95







LANCASTER B. MK I/III (DAM BUSTER)

It's 21.15 hours on the evening of May 16th, 1943. A flight of specially prepared Lancaster bombers is leaving R.A.F. Scampton for Germany.

After months of planning No. 617 Squadron are at last embarking on an operation destined to change the course of World War II.

Your objective is to destroy the Mohne, Eder and Sorpe dams, thus crippling Germany's industrial heartland.

This detailed and authentic simulation allows you to play the part of **PILOT, NAVIGATOR, FRONT GUNNER, REAR GUNNER, BOMB AIMER** and **FLIGHT ENGINEER.**

You fly at low altitude over Europe, on the lookout for deadly ME110 night fighters, dodging barrage balloons, searchlights and flak. At the target you'll need all your nerve and skill to control the aircraft and release your deadly payload whilst under enemy attack.

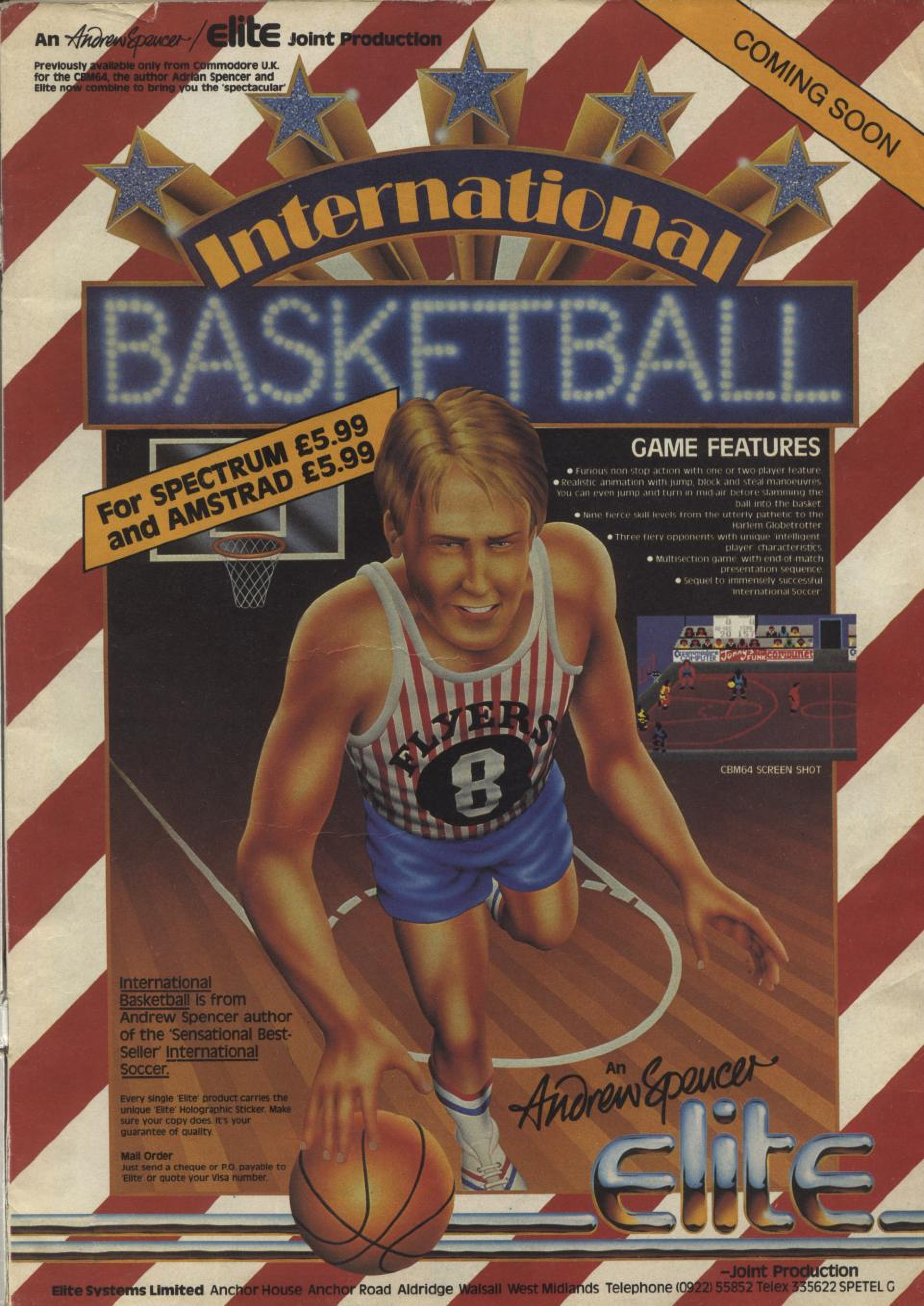
Game features include: **SUPERB GRAPHICS & SOUND · REALISTIC JOYSTICK CONTROL · PILOT'S SCREEN & INDICATORS · MULTIPLE SCREEN NAVIGATOR'S MAPS · FRONT & REAR GUNNER'S SCREEN · BOMB SIGHT SCREEN · ENGINEER'S INDICATORS.**

Game Package includes: Comprehensive flight instructions, maps and confidential documents including authentic material by Barnes Wallis and Wing Commander Guy Gibson.

U.S. GOLD All American Software

Sydney Development Corp.

Designed and Developed by Sydney Development Corporation. Licensed in conjunction with International Computer Group. Manufactured in the U.K. by U.S. Gold Limited, Unit 10, Parkway Industrial Centre, Heneage Street, Birmingham B7 4LY. Telephone: 021-359 8881. Telex: 337268.



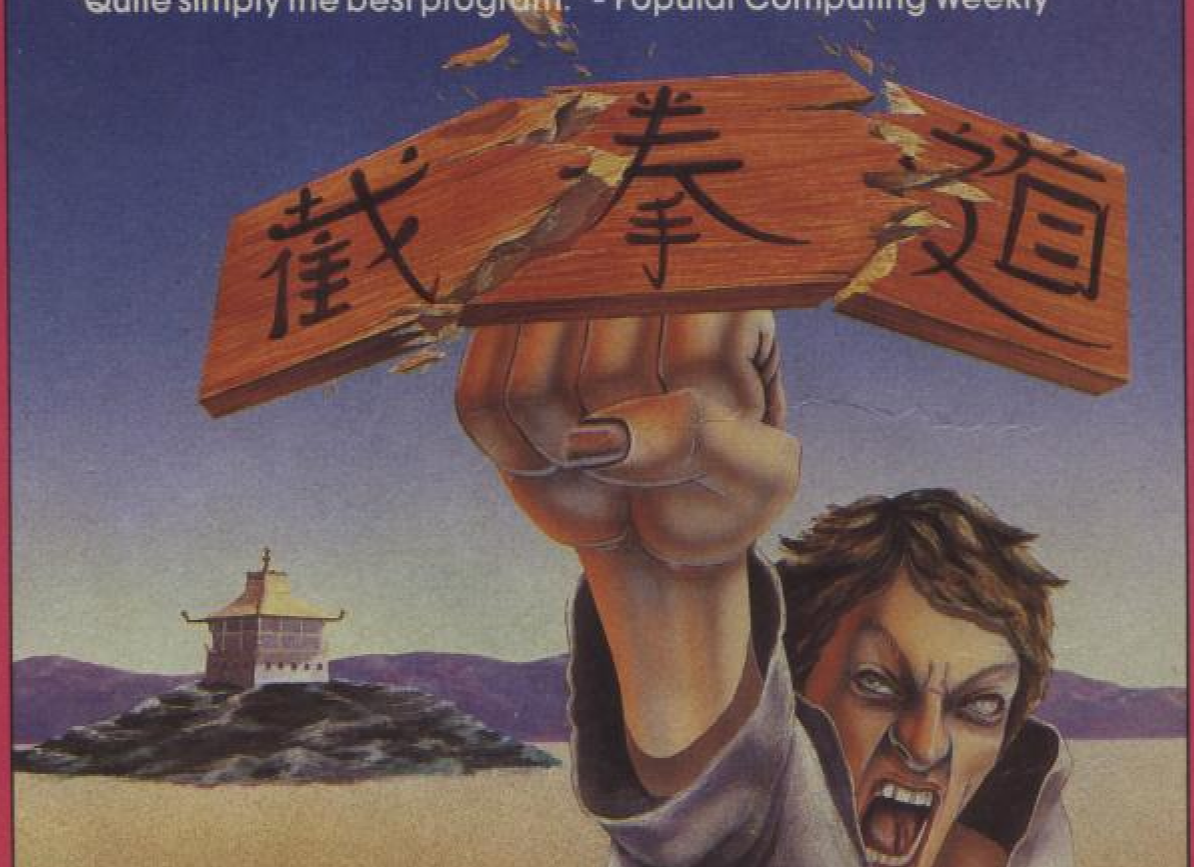
An Andrew Spencer / Elite Joint Production
Previously available only from Commodore U.K. for the CBM64, the author Adrian Spencer and Elite now combine to bring you the 'spectacular'
COMING SOON
International
BASKETBALL
For SPECTRUM £5.99
and AMSTRAD £5.99
GAME FEATURES
● Furious non-stop action with one or two-player feature.
● Realistic animation with jump, block and steal manoeuvres. You can even jump and turn in mid-air before slamming the ball into the basket.
● Nine fierce skill levels from the utterly pathetic to the Harlem Globetrotter.
● Three fiery opponents with unique 'intelligent player' characteristics.
● Multisection game, with end-of-match presentation sequence.
● Sequel to immensely successful 'International Soccer'
CBM64 SCREEN SHOT
FLYERS
8
International Basketball is from Andrew Spencer author of the 'Sensational Best-Seller' International Soccer.
Every single 'Elite' product carries the unique 'Elite' Holographic Sticker. Make sure your copy does. It's your guarantee of quality.
Mail Order
Just send a cheque or P.O. payable to 'Elite' or quote your Visa number.
An Andrew Spencer
elite
-Joint Production
Elite Systems Limited Anchor House Anchor Road Aldridge Walsall West Midlands Telephone (0922) 55852 Telex 335622 SPETEL G

THE WAY OF THE *exploding fist*



Become a master of this mysterious ancient art: progress from novice to Tenth Dan and test your strength and discipline. You can control your character with either joystick or keyboard - 18 different manoeuvres including blocks, flying kicks, leg sweeps, roundhouse and even somersaults!

Challenge the computer, facing opponents of progressively greater skill, or compete with a friend. THE WAY OF THE EXPLODING FIST has it all - addictive competitive action, dazzling graphic animation and sound. The wait is over - you are about to face the challenge of a lifetime! "Spectacular, startlingly original epic, most televisual game I have encountered."- Daily Mail.
"Quite simply the best program." - Popular Computing Weekly





from **MELBOURNE HOUSE**

Now available for Commodore 64 at £9.95. Available soon for the Amstrad £9.95 and Spectrum £8.95.

Available from selected branches of
GREENS, COMET, LASKYS, Rumbelows
WOOLWORTH, WHSMITH, Boots, John Menzies
Spectrum Shops and all good software dealers.

ISSUE No. 19 AUGUST 1985

CRASH
ZX SPECTRUM

Contents

Features

D.I.Y

Regulars

The next issue of CRASH will be on sale from 29 AUGUST. Make sure you get a copy, and we won't sulk. Deal?



Publishing Executive
Roger Kean
Editor
Graeme Kidd
Technical Editor
Franco Frey
Art Editor
Oliver Frey
Production Designer
David Western
Software Editor
Jeremy Spencer
Adventure Editor
Derek Brewster
Strategy Reviewer
Angus Ryall
Staff Writer
Lloyd Mangram
Contributing Writers
Matthew Uffindell, Chris Passey, Robin Candy, Ben Stone, John Minson, Mark Hamer
Client Liaison
John Edwards
Production Manager
Sally Newman
Subscription Manager
Denise Roberts
Mail Order
Carol Kinsey

CRASH Magazine is published monthly by **Newsfield Ltd**, 1/2 King Street, Ludlow, Shropshire

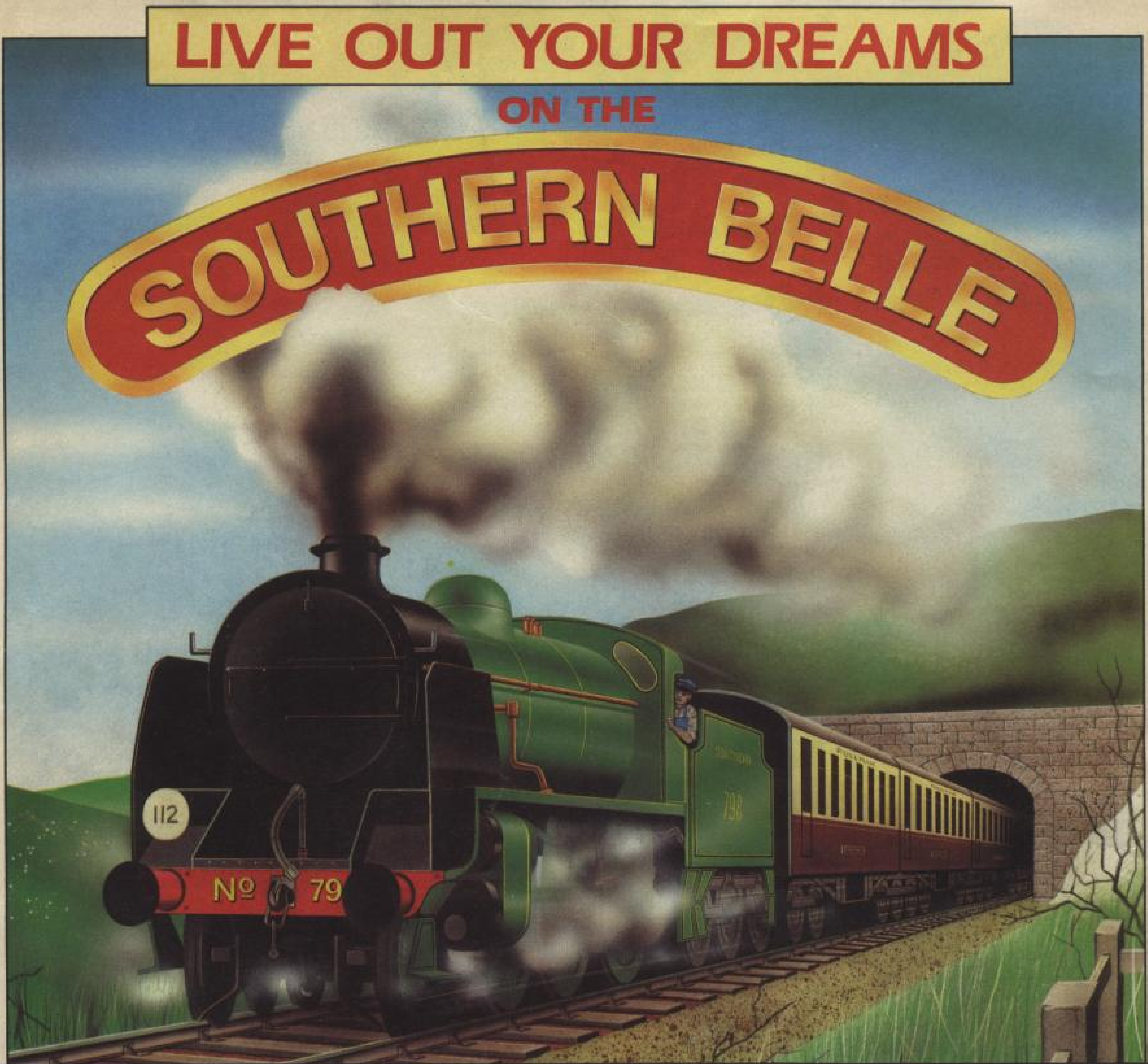
☎ Subscriptions **0584 5620**
☎ Editorial/studio **0584 5851**
☎ Advertising **0584 5851**

Colour origination by Scan Studios, Wallace Road, London N1; Printed in England by Carlisle Web Offset (Member of the BPCC Group), Newtown Trading Estate, Carlisle, Cumbria.
Distribution by COMAG, Tavistock Road, West Drayton, Middlesex UB7 7QE

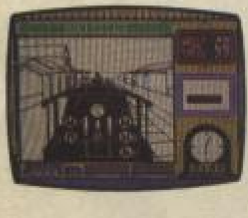
Subscriptions: 12 issues £14.50 post included (UK Mainland); **Europe**, 12 issues £21.50 post included. Outside Europe by arrangement in writing.

MICRONET:
You can talk to CRASH via Micronet. Our MBX is 105845851

Cover by Oliver Frey





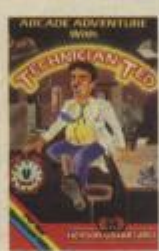


Journey back to the 1930's and the glorious days of steam aboard the footplate of the powerful King Arthur Class 4-6-0.
You can almost feel the heat from the firebox and smell the billowing smoke when you thunder along the famous London to Brighton run.
Using the footplate controls and gauges you will tow the Pullman carriages from Victoria to Brighton in 60 minutes. Any delays will ruin your timetable, so keep an eye on your stocks of water and coal – you can check the efficiency of your coal burn by the density of the smoke. Your present speed, time and the position of the next signal for guidance are also displayed.
Wipe the soot from your eyes and peer out of the cab to pick out the 24 stations as they rush by. Look out for other well known landmarks such as Battersea Power Station and the Clayton Tunnel.
Take the option as the driver with your Spectrum guiding you along the right track, or try harder levels where you are the driver *and* the fireman, perhaps facing adverse conditions that could make you disastrously late!
Realistic controls such as the regulator controlling the flow of steam to the cylinders, the damper controlling air flow to the fire, vacuum brakes and the fire doors, plus authentic moving graphics and sound, make Southern Belle second only to the real experience.
You have steam up, there's a strict timetable, the Southern Belle is all yours.
Now that was the age of the train!

For all 48K ZX Spectrums. Price £7.95



Avalon
Graphic Adventure Movie
For all 48K Spectrums **£7.95**



Technician Ted
Arcade Adventure
For all 48K Spectrums **£5.95**
and Amstrad CPC 464 **£7.95**

GSH

HEWSON CONSULTANTS

56b Milton Trading Estate, Milton, Abingdon, Oxon, OX14 4RX.

For mail order send cheque/postal order made payable to Hewson Consultants. For credit card sales state your Access/Barclaycard number and enclose a specimen signature. Don't forget to include your own name and address.



Dragontorc
Living Adventure Movie
For all 48K Spectrums **£7.95**
and Amstrad CPC 464 **£7.95**



Heathrow International
Simulation
For all 48K Spectrums **£7.95**
and Amstrad CPC 464 **£7.95**

As part of our continuing development of innovative software we are always happy to evaluate software sent to us with a view to publication.

CRASH

MICRO GAMES ACTION

A NEW EDITOR

After exactly one and a half years of publishing CRASH, it seems an opportune moment for a change of editorship. I am moving over to become the editor of our sister magazine, ZZAP! 64 because its editor, Chris Anderson, has now left Newsfield. The responsibility for CRASH falls into the experienced hands of Graeme Kidd, who has been the assistant editor since Christmas. The change around hardly represents a big move, since both our desks face each other across some six feet of the same office area and barely a rubber band's flick away from software editor Jeremy Spencer.

It's an opportune moment, as well, in terms of timing, for CRASH has now become, thanks to you the readers, just about the most popular computer title in Britain, with sales rivalling those of the biggest and longest established publications in the field. Every indication points to the fact that sales are still rising rapidly — so, hello to the 4,000 (approximately) new readers this month!

I haven't entirely abandoned CRASH, however, as there are still lots of things to write for the magazine, but from now on, the day to day headaches will all belong to Graeme! So with no more ado, I'll hand over the page to your new editor, who has a few strong things to say about . . . what follows.

Roger Kean

WHAT A SILLY HUNT!

There's more to a good magazine than a string of exclusives. In the last couple of months, however, the race for 'scoops' in the software industry has been on — with a vengeance — and a few people have been left with egg on their faces in the hunt for exclusives.

Some software houses have a very strange idea of what constitutes an exclusive story — one in particular peddled each part of a three-part game as three separate exclusives, while another managed to hand out an exclusive on the same product to several magazines simultaneously, which left everyone looking rather foolish. 'It all depends on what you mean by "an exclusive",' as one software house said recently.

All good fun really, except a couple of magazines, annoyed at having missed out on previews and exclusives have resorted to 'dirty tricks'. 'We don't hold discussions with companies which advertise with CRASH' was the message given to a software house by one of our supposedly reputable competitors at the start of a meeting the other week: the meeting ended rather abruptly! A day or so later a carload of executives from the meetingless magazine was sent up the M1 to buy an expensive lunch for the people who advertised in CRASH. (We don't have to buy our advertisers large lunches — cheers lads!)

Another editor, this time from a Commodore magazine, was miffed by an exclusive review of a certain game in our sister magazine ZZAP! 64, and rang up the software house concerned to inform them that someone had been in touch with his classified advertisement manager trying to sell pirate copies. It would be strange, considering the circumstances, if he hadn't recognised perfectly well that this would cast aspersions on ZZAP!'s integrity, as these copies must either have been taken from the one and only working version of the game, lent to ZZAP! for the review, or have been supplied by someone from the software house itself; indeed to make the point, the software house was told that the classified ad contained wording to the effect ' . . . as seen in ZZAP! magazine'. As it was, the editor concerned was unable to provide any names and addresses to substantiate his allegations — nor was the software house through their own private investigations. No pirate copies existed, and the whole exercise was a set-up.

The same thing happened to CRASH — the same software company was contacted about a Spectrum game by the same magazine publisher, who claimed that pirates had contacted them having obtained copies of their Spectrum game which we reviewed exclusively. Oddly, the magazine claimed, these pirates mostly lived in the Midlands. (Ludlow's in the Midlands — geddit?) This time, the allegation was that either CRASH mail order had supplied the game, well before release date, or that the pirates had clandestinely received an illegal copy from someone at CRASH. Trouble was, the 'informant' didn't know that the name of the game had been changed at the last moment, and that we had been given such an early copy, that ours still had the original name. If we had supplied a pirate, he would be offering copies of the game with its original name — which the informant didn't know. Moral: If you're going to cast aspersions, make sure you get your facts straight.

But such behind the scenes wranglings between supposed grown-ups, involving peeved magazine editors and fibbing advertisement salespeople telling untruths about our circulation figures are not really of direct impact to CRASH readers — a band which grows in number by thousands every month. And they have little impact on CRASH itself.

If our competitors stopped to think for a moment, they might realise that giving a full review to a game which has only been seen in a part finished state, just so they can use the banner 'EXCLUSIVE', is really ripping off their readers.

Giving a couple of paragraphs by way of a review to a game which hasn't even seen the inside of their office as one Spectrum magazine recently did, is really a total con job. On the Commodore 64 front, the ZZAP! team has noticed exclusive reviews of 'Commodore' games in other magazines which have been illustrated by Spectrum screen

Mr Graeme Kidd



shots (Rocky Horror Show, for one) and are really reviews of Spectrum games!

Writing an exclusive review of an unfinished game by lifting chunks from Press Releases, and joining them together with well-chosen phrases so it sounds like the writer has played the game is little short of fraudulent. Especially if the author has only played the game on another computer, or had a ten-minute run through during a visit to the software house's offices.

A few true stories, each from a different magazine. All of which are probably losing readers to CRASH (and ZZAP!) as a result of their dirty dealings. Suits us!

Like all journalists, the CRASH team enjoy getting a good exclusive — but if it is an exclusive preview, we'll call it that, and not pretend we've had a chance to play the game and then go on to invent a 'full' review. We've had a couple of early looks at new products in this issue of CRASH, from Mikro-Gen and Legend amongst others, but we're not calling them exclusives.

We've dropped out of the race — we're winning a far more important one. Anyway, our readers are quite bright enough to work out where they can read genuine comments ahead of the crowd, without having to be told so in big letters. Nor have we got time for petty wranglings and smear campaigns — we're too busy having fun and putting together magazines we enjoy writing as much as we hope you enjoy reading.

Graeme Kidd

PROGRAMS REVIEWED IN THIS ISSUE

ADVERTISERS' INDEX



DYNAMITE DAN

94% Crash Smash

"What makes the game is the graphics – large, witty, bizarre and beautifully animated . . . each screen has something remarkable, and horribly difficult puzzles . . . Dynamite Dan is not just another Miner surrogate and is at least as essential to your collection."
Popular Computing Weekly.

Popular Computing Weekly Pick of the Week

48K Spectrum/Spectrum + £6.95

MIRRORSOFT

Maxwell House, Worship Street, London EC2A 2EN. Tel 01-377 4600
Trade orders to: Purnell Book Centre, Paulton, Bristol BS18 5LQ. Tel 0761 413301

PLAY THE BIG FIST



FRANK BRUNO
GREAT BRITAIN

(THE CHALLENGER)

Now, meet eight of the world's most <u>unlikely</u> heavyweight contenders in the boxing simulation to beat 'em all!



1 CANADIAN CRUSHER
CANADA
The big, plodding, lumber-jack from Canada, with the beauty of a grizzly bear and the speed of an elephant.



2 FLING LONG CHOP
JAPAN
All the way from the land of the rising Hi-Fi is Fling Long Chop, a martial arts master of No-Can-Do.



3 ANDRA PUNCHEREDOV
USSR
Andra is a fast, dancing Russian who goes to your head faster than a neat glass of Vodka.



4 TRIBAL TROUBLE
AFRICA
Tribal means trouble for anyone, he has a temper that gets the better of you! Landing the punches with unnerving accuracy.



5 FRENCHIE
FRANCE
Frenchie may appear to be cool, suave and sophisticated, but this deceptive façade hides a rather menacing individual, ready to make you see stars.



6 RAVIOLI MAFIOSI
ITALY
Ravioli is not a man to mess with. He knows all the dirty tricks, and uses them without a care in the world.



7 ANTIPODEAN ANDY
AUSTRALIA
Fed on a diet of empty lager cans, this man feels no pain. Pure un-interrupted punch power.



8 PETER PERFECT
USA
World Famous, World Champion Peter Perfect. The most neat and accurate boxer in history is set to drive his engine of glory all over you. Could anyone be a match for macho man?



Every single 'Elite' product carries the unique 'Elite' Holographic Sticker. Make sure your copy does, it's your guarantee of quality.

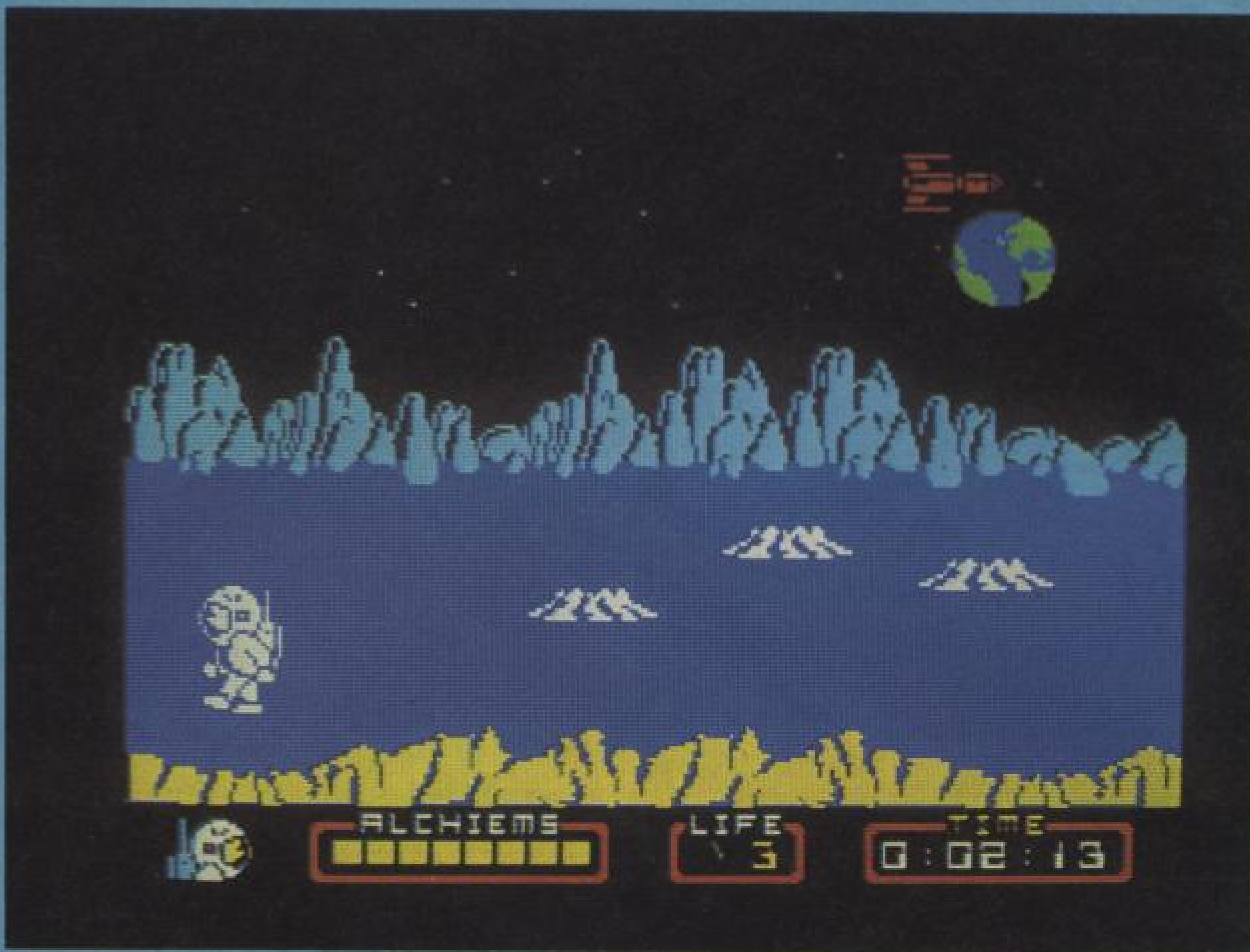
Mail Order: Just send a cheque or P.O. payable to 'Elite' or quote your Visa number.

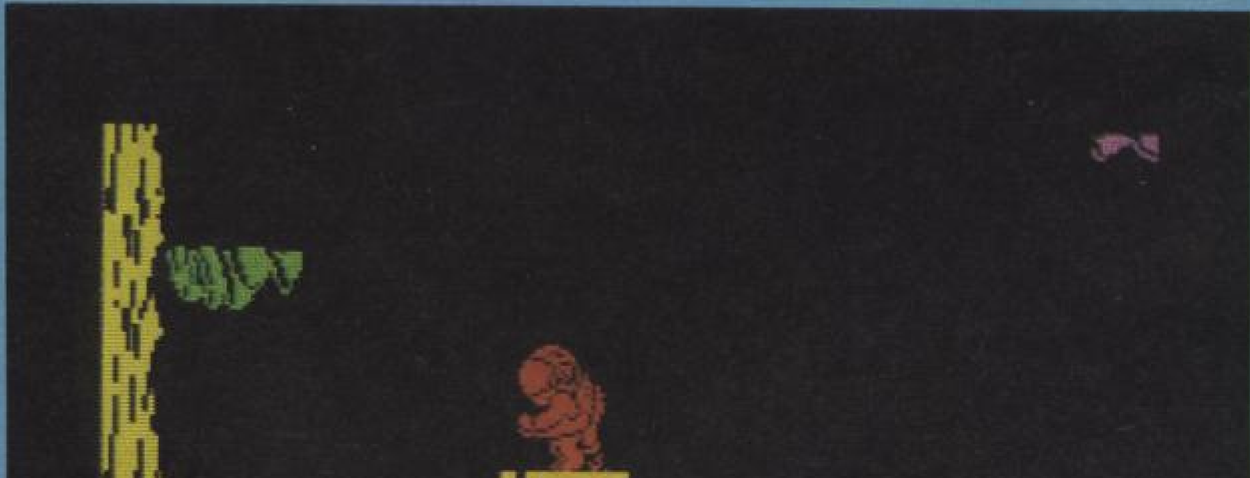
A CRASH Smash

N•O•D•E•S O•F

NODES OF YESOD

Producer: Odin Computer Graphics
Memory required: **48K**
Retail price: **£9.95**
Language: **machine code**
Author: **the team**





The blurb sheet that comes with the game goes on at length to describe the home, breakfast and lifestyle of The Rt. Hon. Charlemagne 'Charlie' Fotheringham-Grunes (our hero, and alleged apprentice saviour of the universe). You may fancy the mission, set him by a little chap in a rhodedendron bush, rather less than the breakfast (butter dripping kippers etc) he has just downed. What the chap form ICUPS tells him in rather broken English (either that or the Odin spellchecker needs a good kick) is that they are getting some rather strange signals from the moon. Would Charlie be so kind (and so stupid) as to go and find the 'erbschectt' responsible?

The game begins with you wandering about on the surface of the moon (it must be the moon because in the background there is a very nice piccy of the earth). As you amble along, try to avoid falling down the holes before finding a friendly mole — the lunar moles are a helpful bunch compared to the peskies found on (and in) your average earth lawn. To give you some idea of the humour incorporated into this game the wall chewing tunnel finding mole has braces!

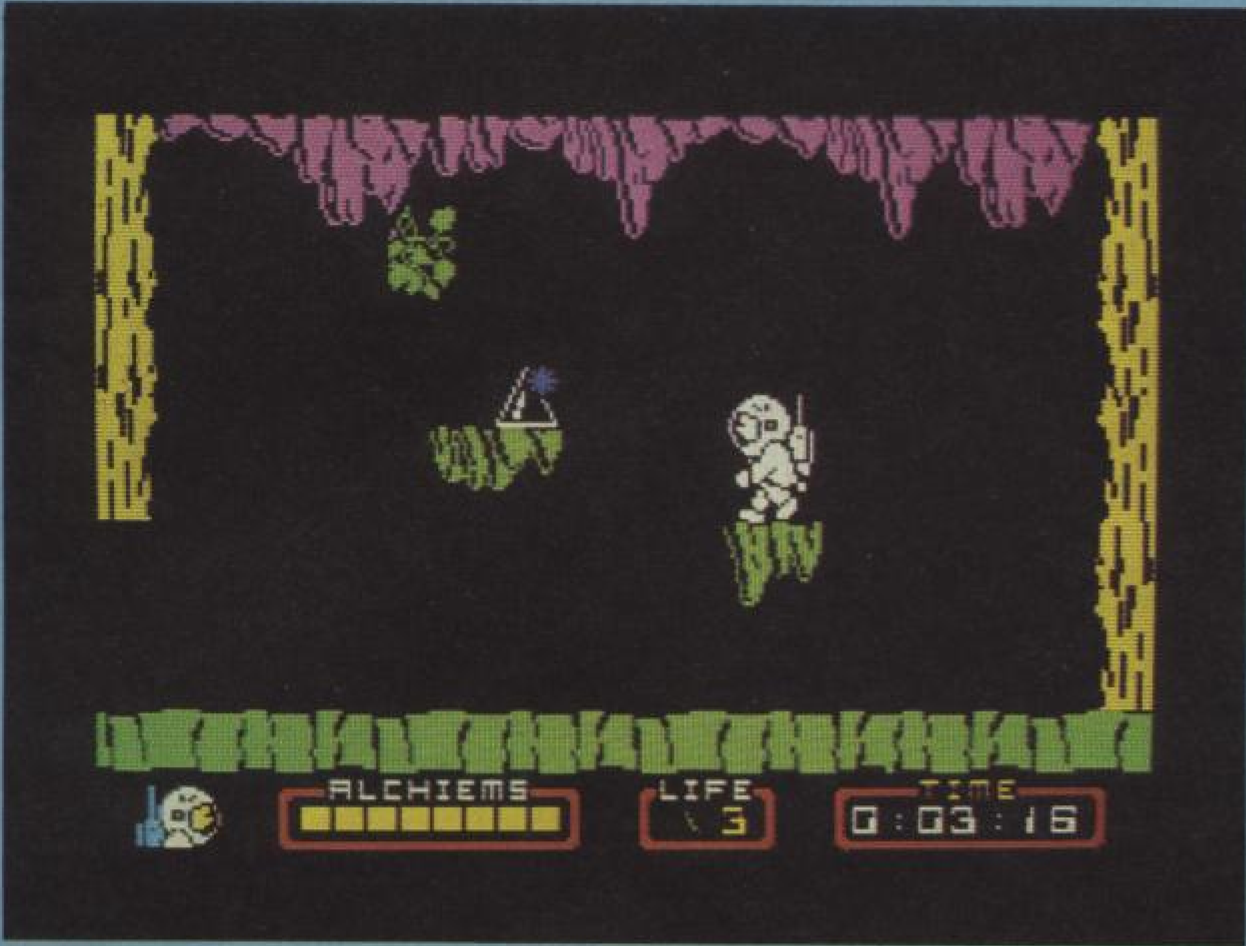
With mole in tow leap down one of the holes and you will find yourself in a cavern with ledges and monsters, and more ledges and monsters! Most of the monsters are a nuisance — they merely get in your way rather than doing you harm — but they are quite fun to squash. Lower down in each of the caverns you find monsters of a different composition; they are not so easy to kill, and if you get too close you will be thrown all over the place and lose a great deal of energy.

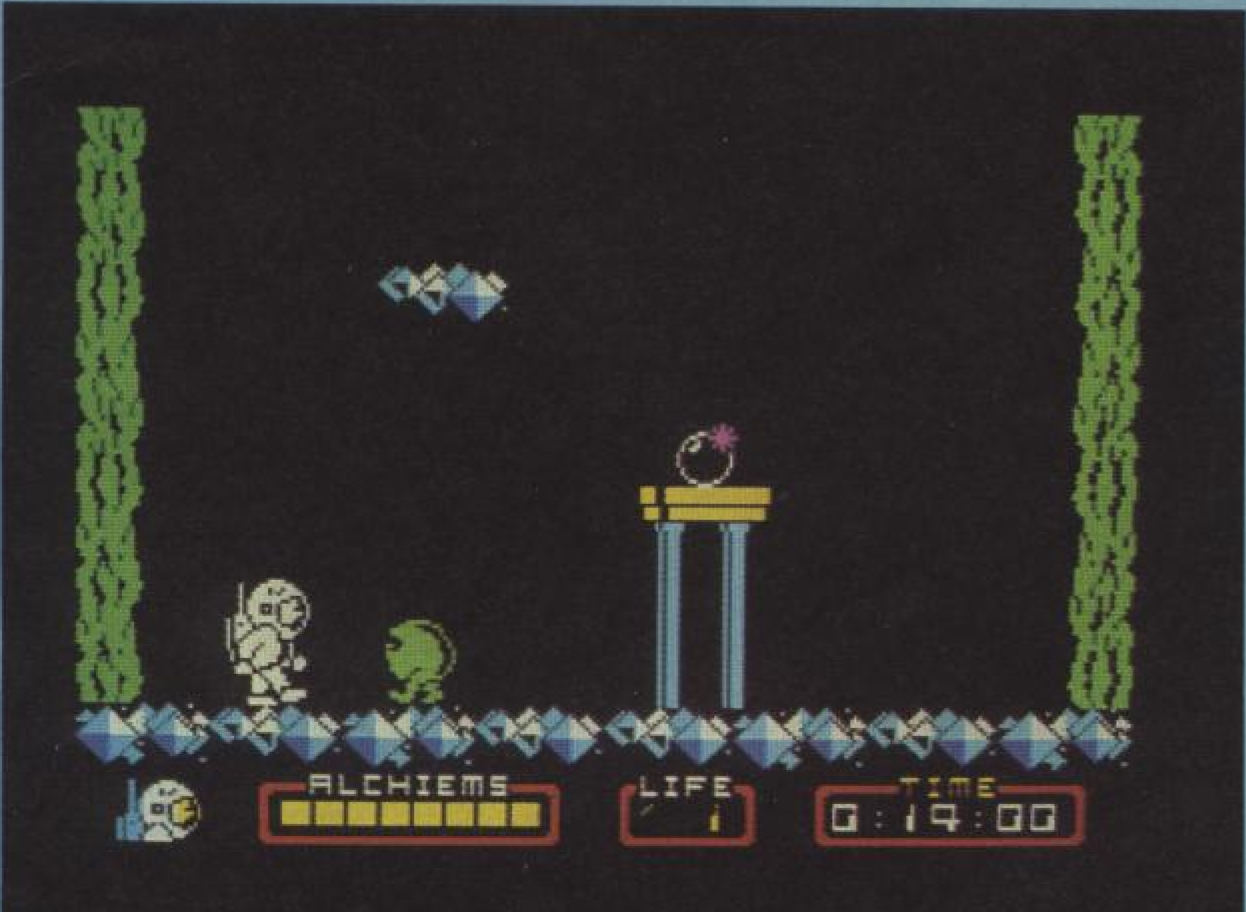
Monsters aside it's best not to forget the main purpose of Charlie's trip and which is to find the Monolith. He has already worked out that to get to it he needs to find and collect eight 'keys' or alchiems, so he must explore the caverns and stay alive. The alchiems are rather attractive crystal objects. Indeed, it is so attractive that you are not the only one collecting them, so proceed with great care if you don't want to become a victim of what could be the first lunar mugger.

The task is pretty simple but is hugely complicated by the size of the cavern system; not all of the access routes are clear so you will have to use the mole to make extra tunnels. The game includes features such as whirlwinds that teleport you to somewhere that you would rather not be. Huge and deep shafts also exist, which can mean the certain loss of a life if you tumble down one — unless you get lucky and find that the one you just fell into has a very powerful up draft.

Extra lives can be found scattered about the sub-lunar environment, which is just as well because on the bottom of the screen you can see your vital signs ticking away, your current life force ebbing away and your movements slow with every beating you take. When you get an extra life you will also find yourself with some things called

Y•E•S•O•D





'Charlie' explores the lunar caverns

gravity sticks. These are very useful because not only do they render galactic muggers harmless but also induce a gravity field in the immediate area causing all monsters (if you can count a cuddly teddy on a spring as a monster) to fall to the bottom of the cavern.

CRITICISM

● **'After starting the game I had to look twice to make sure that it was not by Ultimate. We are talking fab graphics here a really detailed main character which somersaults with a degree of smoothness that puts a Rolls Royce to shame** (*RR's work better greasy side down — Soft Ed*). **I really enjoyed** *Nodes of Yesod* **but I was slightly disturbed by the similarities to** *Underwurlde*, **but that aside, it's a SMASH to say the least. Little things like the feature of the mole that chews it's way through walls really add to the game. Overall an excellent game which is certainly related to one of the mega-whatsits from Imagine that we never got to see.'**

● 'Nodes of Yesod *has got to be one of the best games this year and probably one of the most playable I have loaded into my Spectrum to date. It has brilliant graphics which are very well drawn and animated. The sound is great, and there is a fantastic speech sequence just before the last block of code loads. I love the way that your man jumps, very similar to the character in* Impossible Mission *on the CBM. At first sight Nodes of Yesod seems much like* Underwurlde *by Ultimate; in fact there are a number of other similarities, the music for example sounds very like that from* Shadowfire,*and the mole acts in a similar way to the servant in* Dragontorc. *I had trouble loading the version I was given but I understand this fault was a unique one (which is a relief). This game is certainly a CRASH SMASH'*

● 'Immediately this game had loaded I was overwhelmed by its quality, and after a considerable time playing it I am even more impressed. There is so much attention to detail, the chewing noise of the mole, the movement of the of the characters, the inside of the caverns and tunnels, everything is well done, even down to the little ocilloscope which shows your energy level. The graphics are superb and very rewarding. There are some fantastic surprises in store and that's what makes the game so playable. Add the fact that the game does not require the brain to work overtime to solve hundreds of ever-so-subtle problems and you have a game that is addictive but not over frustrating. A very worthy SMASH and I can't wait to see more from Odin'

COMMENTS

Control keys: Q-R/A-F up/down, alternate bottom row keys for left/right
Joystick: Kempston, cursor and Interface 2
Keyboard play: probably better than using a joystick
Use of colour: exceptional
Graphics: superlative
Sound: not extensive, but when it is used it's great
Skill levels: one
Lives: three but more can be found
Screens: 256
General rating: you'll be over the moon with this one (!)

Use of computer:	92%
Graphics:	96%
Playability:	93%
Getting started:	91%
Addictive qualities:	90%
Value for money:	89%
Overall:	**93%**

CYLU

Producer: Firebird
Memory required: **48K**
Retail price: **£2.50**
Language: **machine code**
Author: **Geoff Foley**

It wasn't long ago that we all raved about *Knightlore* and *Alien 8*, well now Firebird have produced a game that graphically is very similar but much larger.

To set the scene. The people of Tslu need a leader and it seems that they are prepared to consider any old trog that comes in off the galactic by—ways. puters I/O unit which is located in the start room. There are isolated areas of the maze which can only be reached via a teleport link and to operate the link you will need to find the correct key. You must always keep your eye on the fuel situation — units are consumed very quickly. Scattered around the maze are lots of fuel pods which can be collected and used when needed.

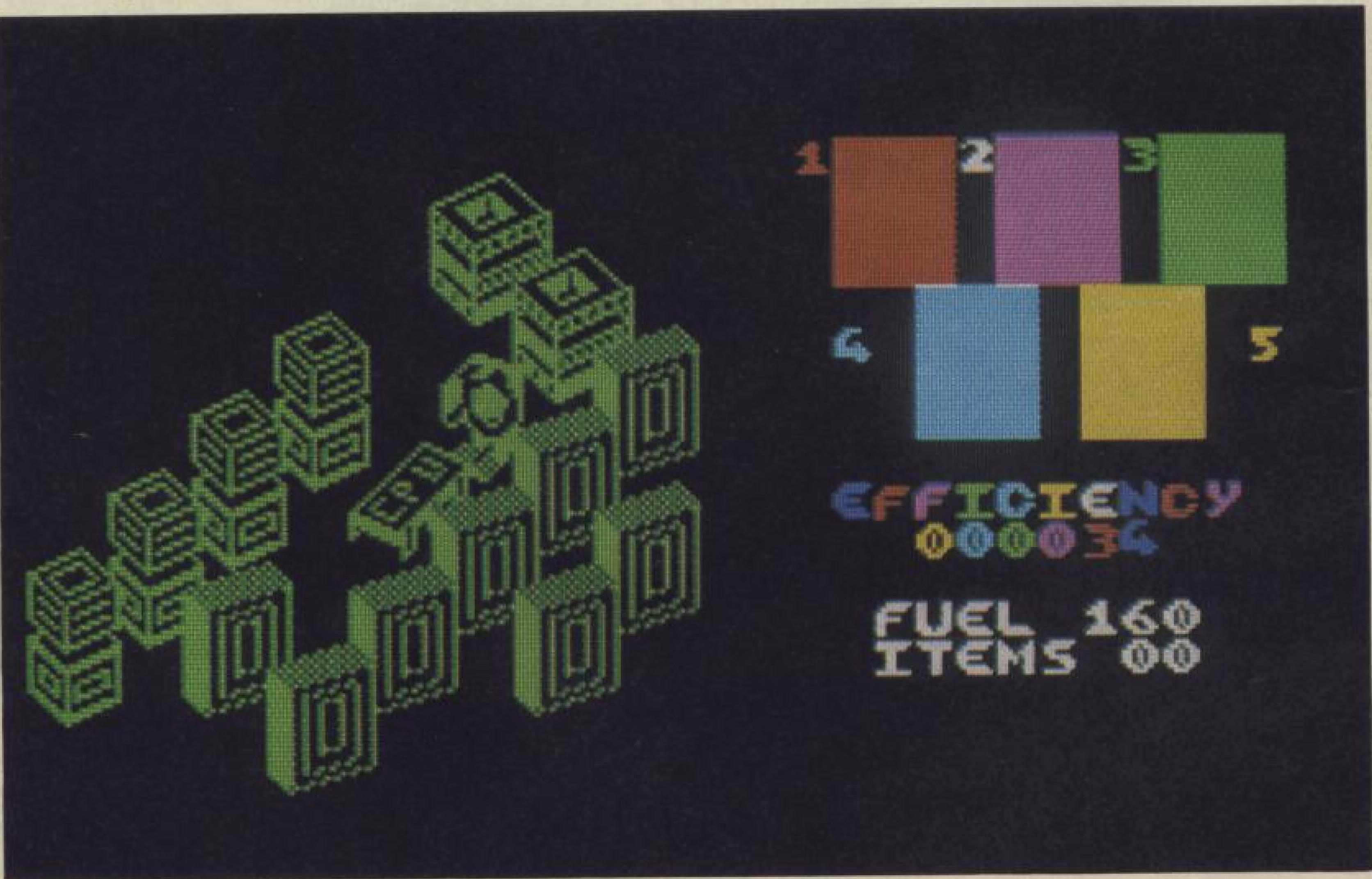
The character on the screen is steered with reference to the direction that it is facing rather than in relation to the screen. In other words if you want to move left you must turn to the left and then move forward, this can be a little confusing at times but one the display and depends on how much time you waste and how quickly you manage to locate items of importance and put them to use.

CRITICISM

● 'The first Alien 8 lookalike is here in the form of *Cylu*. This game has graphics which are very similar to Ultimate's 3D effects but obviously not quite as good. The sound is not very well used, only a few beeps here and there, which is a shame as it might have livened up the game a bit. Playability wise this game doesn't rate too highly as there are a few mobility problems of this game. Although the the graphics on any one screen are washed in only one colour the effect is still pretty good. If you enjoy making maps I am sure you will have some fun with this but don't expect the scenery to be too varied. A very high quality budget game and a must for the mappers.'

COMMENTS

Control keys: very wide selection
Joystick: programmable only
Keyboard play: fine
Use of colour: only one colour to each screen
Graphics: *Knightlore* style but smaller and less detailed
Sound: clicking for movement
Skill levels: one
Lives: one
Screens: two hundred
General rating: for the price this game is a must



You, Cylu, play the part of just one such trog. The Tsluvians have devised a test to make sure that you are capable of leading them and a very complicated test it is too. (Why can't they just hold an election like everybody else?). The Evolians have a very large and unpleasant maze and they have scattered 24 objects around it. To prove your worth you must retrieve all of the objects and return them to the start point, do that and you get to become the TBC (Tsluvian Big Cheese).

The journey around the maze is fraught with dangers hitherto unimagined. To kick off with there are 32 forcefields which can only be passed by finding and loading the appropriate processor into the main com- soon gets used to it. You can only carry five objects at any one time. When an object is picked up it is placed into one of the five coloured boxes on the upper right of the screen. You are able to select which item you would like to use, perhaps a fuel pod, by entering the number of the box. When you approach a forcefield you can determine which coded chip you need to turn it off by pressing the examine button. The screen will come up with the code number and then it's up to you to pop off and find the appropriate CPU.

Against all of the odds you may manage to impress the leaderless ones, but by how much rather depends on your efficiency level. This is given as a constant reading at the side of with your man which make the game more infuriating then fun to play. Generally I wouldn't strongly recommend this game — but as it only costs £2.50, you can't really go wrong.'

● *'There's no point pretending that this game is anywhere near as elegant as those it flatters. But for all of that Cylu is a playable game. I say the graphics aren't as elegant but they are still very good and create a passable effect. The game itself is complex but perhaps a little thin. I enjoyed playing it even though some of the Ultimate perfectionists in the office scoffed at it. Well worth the asking price.'*

● 'I am greatly impressed both by the graphics and by the size

Use of computer	66%
Graphics	75%
Playability	70%
Getting started	68%
Addictive qualities	72%
Value for money	85%
Overall	**79%**

SAIMAZOOM and *BABA-LIBA*



Producer: Silversoft
Memory required: **48K**
Retail price: **£6.95 and £7.95 respectively**
Language: **Spanish machine code**
Author: **Victor Ruiz**

These two games, which are sold separately, form a two part graphical adventure game. The central character is a chap called Professor Indiana Smith (no relation to the Joneses) and his ultimate goal is to rescue poor Victor and nick a bit of loot (salvage treasure) in the process.

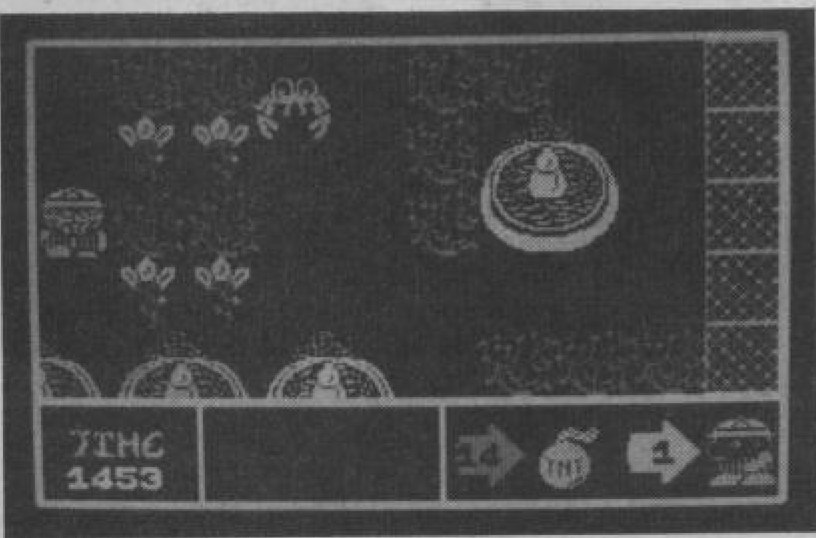
In the first game, *Saimazoom*, our hero is trying to explore a hundred-screen region for some treasure. In effect this area is a maze because hills rivers and trees act as barriers. As Smith wanders about the joint he will occasion upon a variety of items, most important of which are canisters of water — his water level is always falling and needs constant topping up. Other finds include canoes, pickaxes, guns, keys *et al* (Al plays no part however). These items are placed into a 'bag' able to contain only four items, which are shown on the side of the playing area. Now, if Smith finds himself in a tight spot because he is being chased by the Tibag Indians or the occasional wild animal the assorted goodies can come in very handy.

The canoe can be used to escape over a river, the gun to kill or the pickaxe to move mountains. These objects can only be used once, so if you cross a river you must find another to come back. One item that can be retained takes the form of a key. Some of the treasure could be locked in one of the strange locked rooms — the key will let you in for a quick explore but mind the snakes.

For his second mission Smith finds himself in the gardens of *Baba Liba*. His task: rescue Victor, find the treasure and pinch a princess. Again the garden forms a vast maze except that this time the barriers cannot be penetrated. You must use your skill to find a route and get the three keys that allow you into the palace. There are even more nasty people and unpleasant wildlife to deal with but at least you have the means. You start the game with 14 short-fuse bombs. If you find your path blocked by something, drop a bomb and dash into another screen, put your fingers to your ears and wait. When you return the personage will have been killed. Alas one cannot use bombs for blowing up the shrubbery, then the task of reaching the palace would be just too easy.



A screen from Saimazoom



Professor Indiana Smith languishes in the garden of the Palace of Baba-Liba, prior to meeting a sticky end, no doubt.

CRITICISM

● *'Saimazoom* is essentially a collect the bits game. The graphics are unremarkable but this type of game can be instantly playable but, as in this case, has little lasting appeal. I found the animals too easy to dodge and the game too easy to play. *Baba-Liba* is marginally better than part one. The maze area is more enclosed and better drawn, the nasties are a lot nastier so the bombs come in handy. Of the two parts I prefered the latter.'

● 'Saimazoom *is one of those games, you know the sort, you buy it and feel you have been ripped off. Later on you begin to get into it a little more, until you buy another game, after that it rots in a corner. Apart from being very dated I can't find anything desperately wrong with it, but it is rather a step back for Silversoft. The graphics are big and jolly and jerky. Playability-wise* Saimazoom *becomes boring after a few goes, I would give it a miss.* Baba-Liba *on the other hand is a much better game. The graphics, while still dated, seem to fill up the screen a little more (like my Art teacher I hate empty spaces). What little sound there is, is good, more would have helped a lot.* Baba-Liba *is the more playable and more addictive of the two games.'*

● 'I was pretty disappointed with these two games, I can't help feeling they slipped through some sort of time thingie, perhaps from the days of the ZX-80. While they are both fun, *Saimazoom* more so, they get boring pretty quickly. Neither are hard games to play so perhaps there rests the answer. I will recommend them for the toddler gamers, lots of mini fun, not too much aggravation.'

COMMENTS

Control keys: O/P left/right, Q/A up/down, space to fire
Joystick: Kempston
Keyboard play: good choice of keys
Use of colour: very basic
Graphics: neat but dated
Sound: limited
Skill levels: 1
Lives: 4 and 3
Screens: 100 each
General rating: dated, perhaps a good toddler starter kit

Use of computer	52%
Graphics	65%
Playability	46%
Getting started	65%
Addictive qualities	57%
Valueformoney	50&42%
Overall	53 & 48%

ACTION BIKER

Producer: Mastertronic
Memory required: **48K**
Retail price: **£1.99**
Language: **machine code**
Author: **M. J. Child**

It will not escape your notice that the name KP Skips is plastered all over the inlay and even the game, it's all part of a promotional tie up between said KP and Mastertronic. Clumsy Colin is the star of the KP Skips promotional campaign, has stepped off the front of a Skips bag to mount his Action Bike for the duration of this game.

Colin has a friend called Marti who needs to be taken to the local spaceport. A spaceport may seem a little out of place but it seems that Colin is having a bit of a dream. In this dream he must find Marti, but at 8 O'clock he will wake up to the bitter clanging of his alarm clock. Marti must be found before Colin wakes up but Colin's first task is to get some extra equipment together. Problems. First, he needs extra equipment if he is to find his friend — you know the sort of thing, a periscope for example. His motorbike will be very useful but alas it also needs add ons. Colin must collect these extras from his friends to improve the bike's performance. The more auxiliary equipment he has the easier the task becomes.

An example perhaps? This particular town has a great many oil spills, there are mini oil slicks everywhere. If Colin's bike runs into one then he is going to spend a lot of time spinning and generally falling about. The answer, of course, is a better set of tyres. Out of the 150 houses in the town only 50 contain anything of value. When you think you have found a useful house you can enter it and, from the from the birds eye view on the screen, examine its contents. Your progress is frustrated by people not being in when you visit, or if they are in they may tempt you with a cup of tea. If you stay you are wasting valuable time.

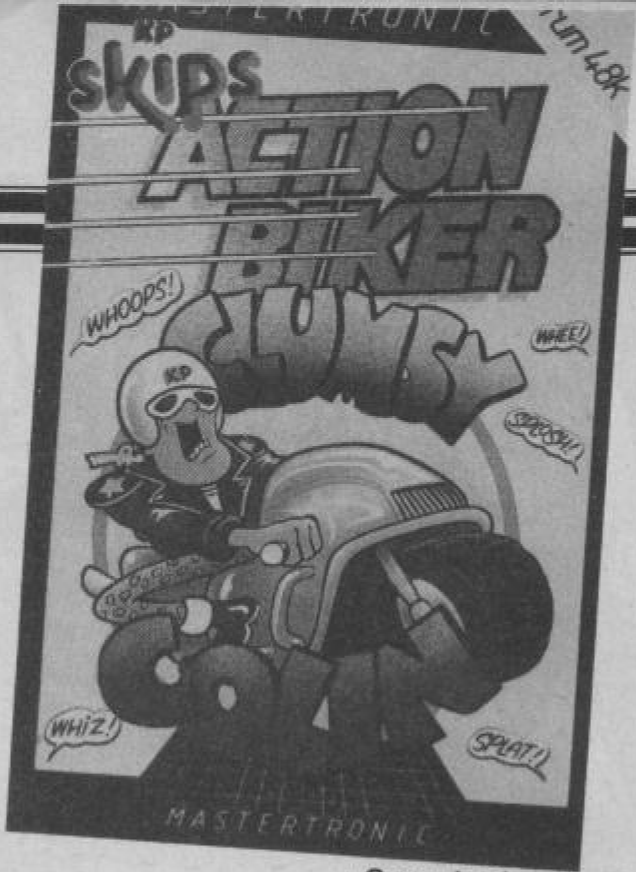
Out on the streets, life is fraught with dangers, the worst being the other traffic. When you collide with another vehicle this will lessen the amount of time left for sleep and if you crash too often, Colin will wake up and that will be that.

Apart from the crash damage you must keep an eye on your fuel. The amount you have is shown on screen, and you can top up your tank from the garages in the town. Scattered about the streets there are packets of Skips for you to pick up, each one gains you a point. A record of the score and high score is kept and presented above the amount of sleep time remaining.

CRITICISM

● *'Action Biker* has inter-game pauses that are far too long. The game itself is pretty decent and scores well for value for money. While it was playable I can't say that I found it addictive. I was also disappointed with both the sound and the degree of control one had over the bike. It was really very difficult to change directions at junctions, for instance.'

● 'Action Biker *seems to following along with the trend for arcade†adventure games. I am not over keen on the presentation of the screen, a lot of space has been wasted. The sound was annoying after only a short time. Has the potential for being a good game but does not quite make the grade.'*





● 'I don't like this game at all. I find it very hard to play and unrewarding to boot. The graphics are poor by Mastertronic standards: there's a lot of flicker, no smooth movement and characters seem quite able to vanish for a while. The other vehicles made the game very frustrating. Before you even get a chance to move from home you are attacked and lose sleep points. I found it very hard to find and enter a house, mostly because the instructions that came with the game are so vague.'

COMMENTS

Control keys: N/M left/right, A/Z accelerate/decelerate, SPACE to change gear
Joystick: Kempston, Sinclair, Fuller, Cursor
Keyboard play: responsive
Use of colour: good
Graphics: below average
Sound: very limited
Skill levels: one
Lives: one
Screens: scrolling

General rating: disappointing

Use of computer	40%
Graphics	53%
Playability	57%
Getting started	41%
Addictive qualities	51%
Value for money	64%
Overall	52%

HOW THE RATINGS WORK

IMPORTANT CHANGE!!!

After more than a year of maintaining the CRASH rating system, we have made one important alteration. The **OVERALL** rating is **no longer calculated as a strict average of the previous 6 ratings.** Now each reviewer is independently allowed to judge the Overall worth of a game as a **separate rating**. We hope this will help overcome some of the inconsistencies which readers have noted in the past.

OVERALL PERCENTAGE is now a separate and distinct rating. ALL ratings are an average of three reviewers' opinions.

Under 30% — a waste of time
31-40% — generally poor but may appeal to some
41-50% — below average to average
51-55% — reasonable average if game type enjoyed
56-60% — above average to good
61-70% — good on most counts, generally recommended
71-80% — very good, recommended
81-89% — excellent
Above 90% — a CRASH Smash, words fail. . .

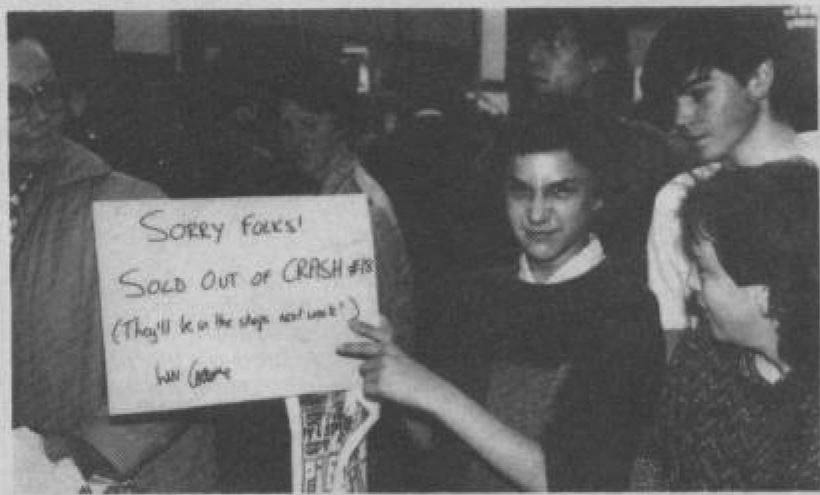
KERRASH! N·E·W·S

ZX MICROFAIR — A HALL FULL OF THINGS?

What a smashing day out we had at the ZX Microfair the other weekend. Apart from having to wait nearly half an hour for breakfast at a Little Chef on the way, everything went smoothly. Arriving in the Horticultural Hall, we set up our stand — and began selling copies of the July issue of CRASH.

After a couple of hours, the 600-odd copies we could spare had all gone and we had time to wander round and take a few photographs. Jeremy Kirsch and Barrie Gordon, pictured here, were just two readers we had to disappoint, having sold out.

The fair was quite fun, all in all, but there were few new or innovative products on show. Lots of cut price games on offer, however . . . and there was plenty to spend your money on, as Matthew Ablewhite and Chris Benington explained to Jeremy Spencer, our Software Editor.







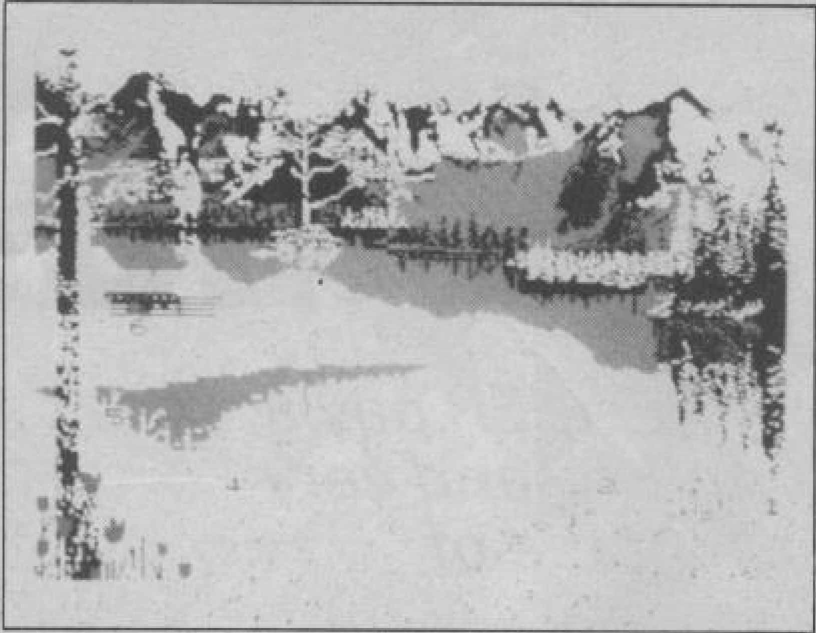
ENSURE YOUR REGULAR COPY OF CRASH

When a magazine is rising in circulation as rapidly as CRASH is doing it tends to sell out immediately and you may experience difficulty in obtaining your copy every month. So the best thing to do is place a regular order with your local newsagent, which you can do by handing him this form.

Please place me a regular monthly order for *CRASH* Magazine.

Name ....
Address ....
....
....

To the Newsagent:
CRASH Magazine is published in the middle of every month by **Newsfield Ltd**, 1-2 King Street, Ludlow, Shropshire SY8 1AQ. **Tel: 0584 5851**, and distributed to the newstrade by **COMAG (08954 44055)**. Please check with the publishers if you have any difficulties in obtaining supply.



GO FISHING WITH ALLIGATA

Next month we'll be running a competition and a half, with **Alligata** who are offering a Week's Adventure Holiday and a full set of fishing tackle to the winner of their *Jack Charlton's Match Fishing* competition.

As a sneak preview, we can say that the competition will require you to identify a whole of range of little swimmy fish from their portraits. So nip down to the library and get hold of a copy of 'Five Hundred Famous Fish' or a similar spotters guide and start boning up......

NEW DEVELOPMENTS AT THE MIRROR

Following the interview with Jim Mackonochie which formed the basis of John Minson's profile on Mirrorsoft in this issue, news broke of Robert Maxwell's financial rescue bid for Sinclair. As our deadline looms, details remain uncertain as to how this will effect Mirrorsoft, but bearing in mind the philosophy of Mirror Group Newspapers to take a positive investment in the future of new technology as outlined in the interview . . . prospects are intriguing. At this stage, however, nobody is willing to say too much. We'll keep you informed of further developments. Meanwhile, the past couple of months have seen two new junior educational packages from the company, plus a highly successful adventure into the world of arcade action with the CRASH smashed Dynamite Dan. Jim Mackonochie promises a new program in the Home Discovery series (to be launched at the PCW show later this year) which will continue Mirrorsoft's commitment to quality, whichever area they are involved in.

ROSETTA TURNS TURTLE

Our very own Educational Software Reviewer, Rosetta McLeod of CRASH Course fame, is about to launch into the world of educational software in her own right. News reaches us from Turtle Software that Rosetta is currently working on a program for them which is based on the oil industry is centred on her home town of Aberdeen. No doubt it'll be a goody . . . but should we let her review it?

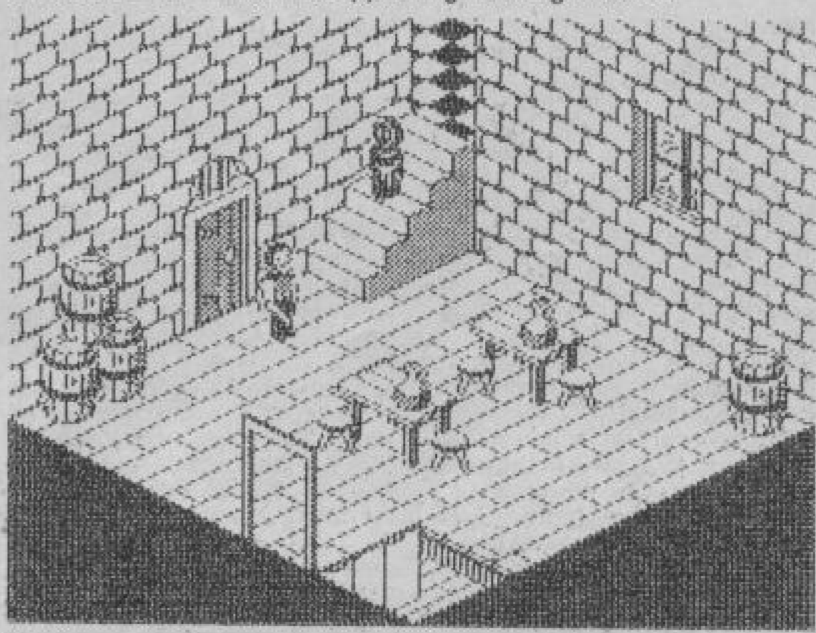
HOLIDAY TIME

This issue **Lloyd Mangram** took his annual holiday immediately after completing the Forum pages, which accounts for the lack of *Merely Mangram* this issue. One game which deserves a quick mention here — *Fairlight* from **The Edge**. All we've seen is a couple of screen dumps from a very early version of the game, but from what we've been told by Tim Langdell, the man behind the company, it promises to be quite a stunning game.

Fairlight will have all the logic of a certain well-known role playing game, and features amazing 3D routines, part of a programming technique the chaps down at The Edge have dubbed 'The Worldmaker'. Much more of that, and the other new release from The Edge, *That's The Spirit* next issue.

Lots and lots of other goodies are also sitting on Lloyd's desk . . . but there's simply not time to tell you about them this month. Sorry folks, you'll just have to wait for a suntanned Lloyd to return from his hols and catch up with him next issue.

As we write this the men from **Argus Press Software** have arrived to show us a host of new games, including *Rupert and The Toymaker's Party*, the first of four games, which are part of the celebrations being held to mark Rupert's birthday (we daren't tell you how old he is this year!) . . . must dash, it's time to go to **Nutwood.** 'Yabadabbadoo!', commented Peter Holme, alluding to another character who will soon be appearing in APS games. . . .



CHARTING THE INDUSTRY

The big cheeses upstairs in Newsfield's financial division suggest we should run a new chart in forthcoming issues of CRASH — a totally innovative ranking of software houses, not by games but by debts. This chart could be the one that takes the temperature of the software industry, month by month, letting you see which of the software companies are not being good snakes, and haven't been coughing up for the advertisements they've placed in our hallowed pages to encourage you to buy their games. Could be interesting. . . .

But our financial wizards do have a point to make. In the last few months several companies have gone bust or disappeared owing us money, having delayed payment for ages. **Fantasy Software** for instance, with £4,190, **Bug Byte** with £1,220 and **Micromania** with £3,475.

Some advertising agencies are being a bit naughty too, collecting money for advertisements from their clients and not passing it on to us for ages and ages.

So the idea of having a chart of the top ten companies who owe us money came to mind, naming names and stating sums. Could make interesting reading throughout the industry — and who knows, dear readers, you might not want to support the companies that don't want to play fair with CRASH.

We're compiling the chart in time for next issue. Look out for it - it could cause a stir!

Breathe new life into the user port

WITH THE 64K SPECT

GRAEME KIDD and JEREMY SPENCER pay a visit to the land of High Technology and very short stay car parks, Bracknell, home of Mikro-Gen

MIKRO—GEN are not well known for their hardware add-ons. In fact their last dabble into that market was with the very first ZX81 joystick (**ZX81**: *an early 1K sub-£100 machine with built in BASIC and membrane keyboard — Galactic Encyclo paedia, Early Earth Computers*). Their latest project, The **Mikro—Plus** promises to make a much greater impact on the Spectrum world.

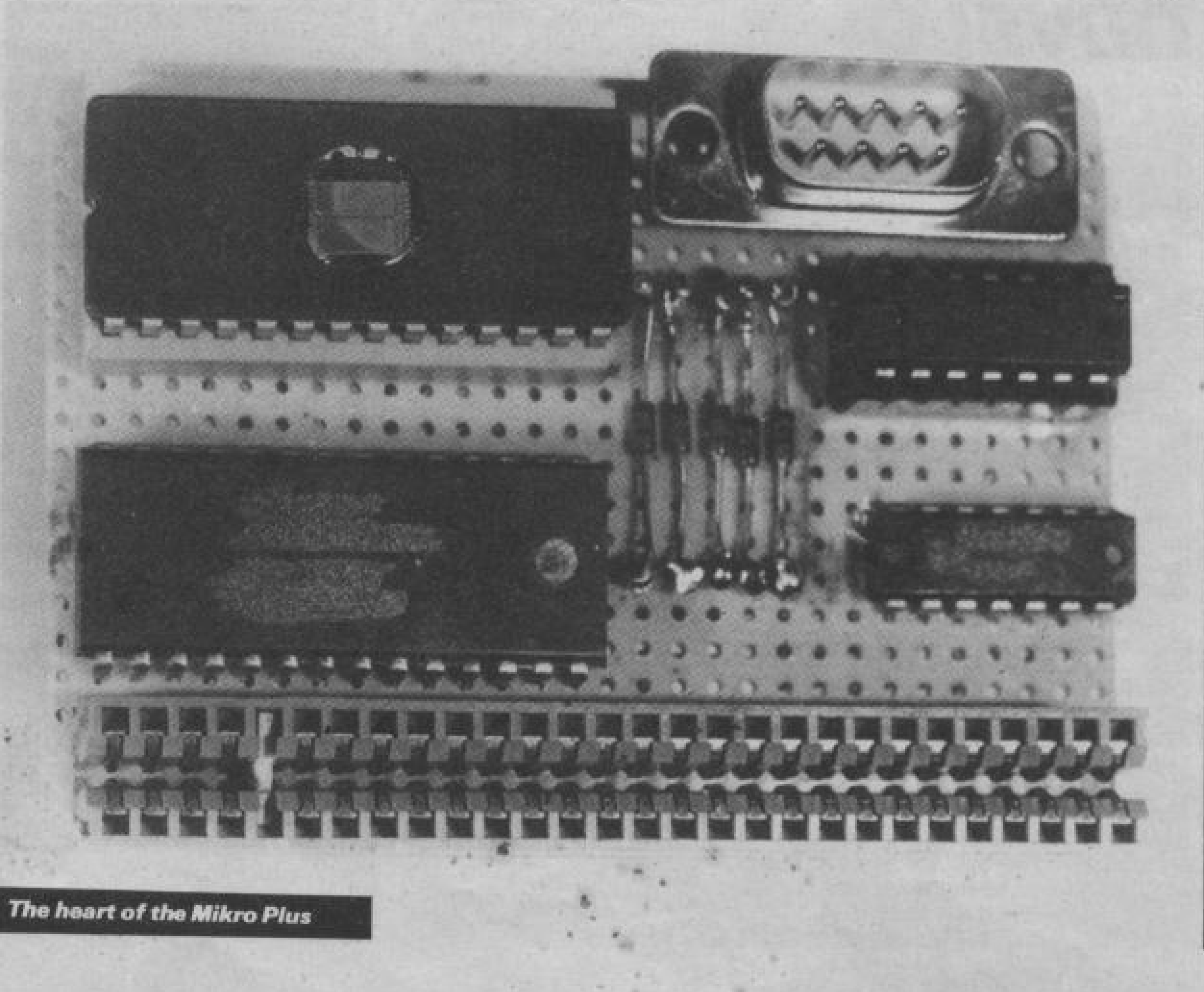
How often have you heard that computer games could be infinitely better if only there was more memory in which to put the things. Way back in the good old days, Imagine promised us a 'mega game' that would only be possible through an extra box of bits stuck onto the back of a Spectrum. We held our breaths; and nearly asphixiated. But, if any of you are still without breath you can relax. Mikro-Gen have taken over where Imagine failed to tread. At this year's PCW Show they are launching an add-on and two games that they hope will set new standards for Spectrum software.

As we all know, the Spectrum uses the Z80 processor which is capable of addressing 64K bytes of memory. Of that 64K only about 42K odd is available for use by software, the rest is either screen working space or taken up by the 16K monitor program. The monitor program is responsible for storing the machine code routines that perform all of the operations we take for granted. For example if you want your Spectrum to print a flashing character to the screen it will have to look up the machine code operations that it needs to do this — and the instructions are held in the form of routines inside the ROM. If you can replace the Sinclair ROM chip with one of your own, with your own routines built into it, you could alter the entire machine. There are disc systems which, while they don't physically remove the Spectrum chips, are able to mask or shadow them. With the shadow ROMs in place the disc can download the routines of its own; the Spectrum can be changed into a dedicated word processor, or communications terminal.

The ability to shadow the monitor ROM is not in itself new, it's an old trick and the BBC and Amstrad machines have such facilities built in. Mikro-Gen have put together a piece of hardware which replaces the Spectrum instructions with code for a game: the rest of the game is loaded in from the cassette. But, the real breakthrough is the price — **£14.95** will get you a complete hardware and software package.

The hardware itself looks rather like a joystick interface and conveniently enough it has one of those built in. With this unit plugged into the Spectrum the programmer can put together a program 50% larger than is usual, **Mike Meek** of Mikro-Gen claims. Because routines designed specifically for that particular game can be put into the chip the memory of the whole machine can be used more efficiently. The built in joystick port is a good example: memory does not have to be wasted catering for a number of different joystick protocols. Some areas of the Spectrum's memory are shared by other functions, so using those 'slow' areas causes delays in accessing the routines. Up till now programmers have had little choice, they had to use what memory was available. Now the fastest areas of memory can hold the code that does the hard and fast work. Filled in vector graphics can become a reality.

Because of the extra space available and because specific routines can be tailored for each game, Mikro-Gen are able to add extra features. Two such features are planned to appear in the first two releases. The first allows users to make a microdrive copy by giving a single



The heart of the Mikro Plus

RUM



The add-on that makes it all possible —
THE MIKRO PLUS

command, the routine will do the rest. Mikro-Gen's **Mike Meek** feels strongly about the problems caused by poor cassette recorders and so wants an Azimuth alignment routine built into the **Plus**. More and exciting extras are being considered for the future.

Initially the system will be launched with two games, *Battle of the Planets* and *Shadow of the Unicorn*. Each one comes complete with cassette and the add-on, the add-on being specific to the individual game. *Battle of the Planets* is a massive, superbly animated arcade shoot-'em-up split into three linked, but separate games. 'I would feel happy selling each part of the game separately,' Mike told us, 'so all three together we see as a real blockbuster'.

The second game, *Shadow of the Unicorn* is a role playing adventure featuring ten individual characters where *Everyone's a Wally* had only five. The game is so involved that a book is provided to set the scene for the game.

The future possibilities for this system are fantastic. If volume sales take off as expected then the games will soon cost even less than the £14.95 you'll have to fork out at the start. Some software houses are tentatively talking about licencing deals. Asked what Uncle Clive thought about the system Mike replied, 'Well I can tell you that there is a definite tie-up between ourselves and Sinclair Research. I do know what Sinclair's plans are but we have signed a non-disclosure agreement and intend to abide by it.'

We tied Mike to the chair and threatened to nail his hands to the table. 'Tell us this Mike, are these plans going to help Sinclair', (ready the nails). 'No . . . (hammer raised) yes — no question about it'.

Sinclair aside, Mikro-Gen's hardware could represent one of the most exciting developments the Spectrum has seen for a long time. When you look at the deal, a superb game, a built in joystick interface, a microdrive routine and an Azimuth alignment routine all for £14.95 I think you will agree that Mike's pet term 'megagame' sits on Mikro-Gen's shoulders more easily than it ever did on Imagine's. And it couldn't have come from a nicer bunch of Wally . . . .

JS



A group of Wally programmers!

FRANK BRUNO'S BOXING

Producer: Elite
Memory required: **48K**
Retail price: **£6.95**
Language: **machine code**
Author: **Andy Williams and Trevor Perks**

It's almost as if the Elite team have been in hiding since their last effort *911 TS* but they have in fact been very busy, putting together their contribution to the current fad for boxing games: *Frank Bruno's Boxing*.

Like in *Rocky*, your view of the action is given from behind your character. The characters are smaller, but they are able to move around the ring to a degree. Unfortunately you cannot control their footwork; this is a shame because this means that not one of the boxing simulations leaves any room for what has to be the smartest tactic — legging it.

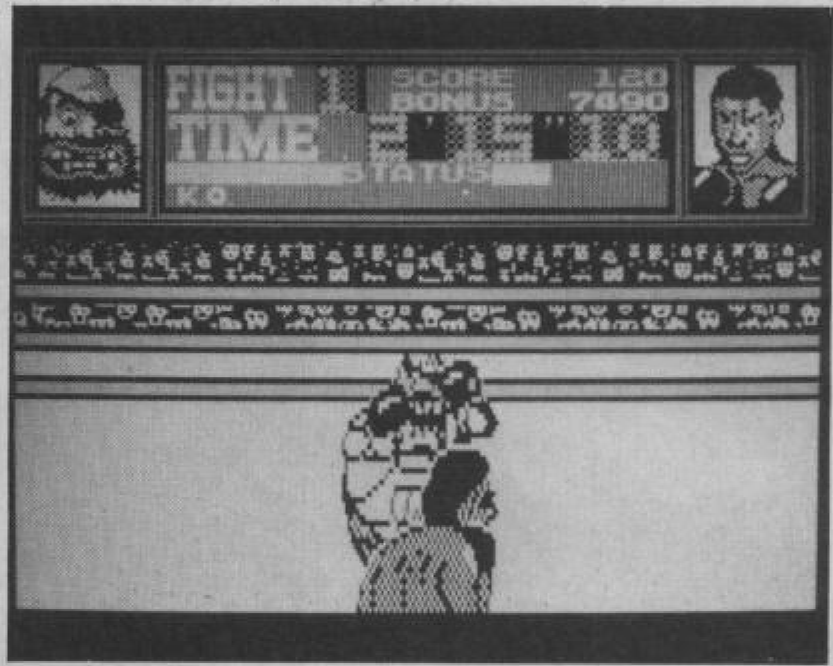
The program allows for a wide variety of movements. Not only are left and right head punches allowed, but body punches too, and if you opponent is tottering on the brink you can deliver a right upper-cut or even a right hook just to finish him off. You can make you boxer dodge left or right, and should you suspect a biggy coming your way you can duck. If you don't fancy exposing yourself to violence by dodging, you are able to put up a guard although you will have to drop it to deliver the body punches or the upper cut. As the two combatants slug it out, they give the appearance of moving round the ring, but this movement is all controlled by the computer.

The type of blow you can deliver rather depends on the state of your opponent's health. At the top of the screen there are two pictures, Bruno on the right and the current contender on the left. Between the two mug shots a clock, two status bars and a knock-out meter are displayed. The status bars increase or decrease depending on the performance of the appropriate boxer: if a boxer catches a lot of punches then his status will decrease until he topples. If his status is low but he manages to turn the tide for a while and give the other guy some gyp, then as his opponent's bar diminishes his own will increase.

If a boxer takes a count because his status bar has reached zero, he will get up to find that his status bar has only partially recovered, thus reflecting his weaker condition. The knock-out meter registers the number of successive blows dealt. If you rain down a hail of blows on your opponent, the arrows on his knock-out meter will build up with each punch until they reach the letters 'KO'. When they flash you can administer your final blows, the hook or upper cut. Should your opponent break your volley with just one return blow, then the arrows will rapidly diminish.

Thus there are two ways you can knock down your opponent: wear him down by reducing his status bar before he reduces yours; or administer a volley of punches culminating with a hook or cut as the knock-out blow. If you achieve three knockouts in under three minutes then you win that round, otherwise your opponent wins on points and you can only ask for a rematch.

After winning your first fight you are given a code which will allow you to load, from tape, the next opponent. The fighting styles of the eight boxers are all different, and each one is harder to beat than his predecessor. The game keeps a record of the best knock-out times against each of the boxers and also a highscore table for the points scored. If you want to defer a bout to a later date, like after Star Trek, then keep a note of the code number. They aren't so easy to come by!





CRITICISM

● 'The main question we were asked at the ZX Microfair must have been "which do you prefer, *Rocky* or *Frank Bruno*?" Well now it's time to stop beating about the bush. I prefer, as boxing simulations go, this one. I agree that the graphics in *Rocky* are a good deal better and clearer but the movement is so limited and repetitive as compared with *Bruno*. This shortcoming is made worse because *Rocky* has four different levels of skill but only the one character. For my part, I would rather leave boxing simulations alone, but I think it must be plain that Elite, for once, offers much more.'

● *'Frank's boxing game is the type of game that gradually grows on you. At first, using a fair few keys, things were difficult. Using the joystick alone, the game was unplayable. Eventually, using a combination of both joystick and keys, I began to make progress. The graphics are messy at times when the boxers cross, but they are generally OK. I found this game addictive.'*

● 'In my opinion this is the best of the boxing games that I have seen this month. Even though its graphics are slightly confusing I prefer them to *Rocky*'s as there is more expression in the faces of the boxers. There are eight different characters in the game, each with their own personality. The first is a bully type who sticks his tongue out at you if you hit him while his guard is up. You can really get into playing this game as it seems very realistic in the way the boxers move and act. Generally this game is very good, although I can see myself getting bored with it as there are only eight characters to fight.'

COMMENTS

Control keys: 1/A guard up/down, I/O jab left/right, I/O with 1 body punch left/right, U/P dodge left/right, Q to duck, any on bottom row for knock-out
Joystick: Kempston and Interface 2
Keyboard play: easier than using a joystick
Use of colour: very little used
Graphics: lack clarity but have a lot of movement
Sound: pretty limited
Skill levels: eight
Lives: three per bout
Screens: N/A
General rating: much more scope than the others. There, now we've said it!

Use of computer	74%
Graphics	83%
Playability	82%
Getting started	82%
Addictive qualities	79%
Value for money	87%
Overall	**86%**





Jack Charlton's MATCH FISHING



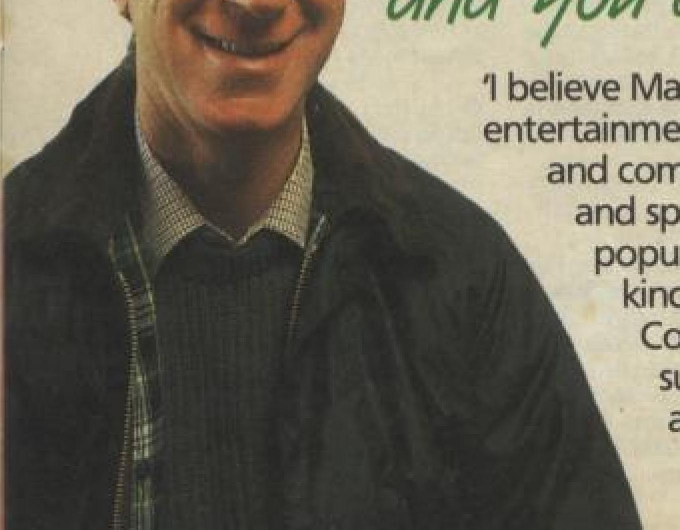
£6·95

Available soon BBC & Amstrad

Unique multi-player action!

Spectrum 48K

CBM 64



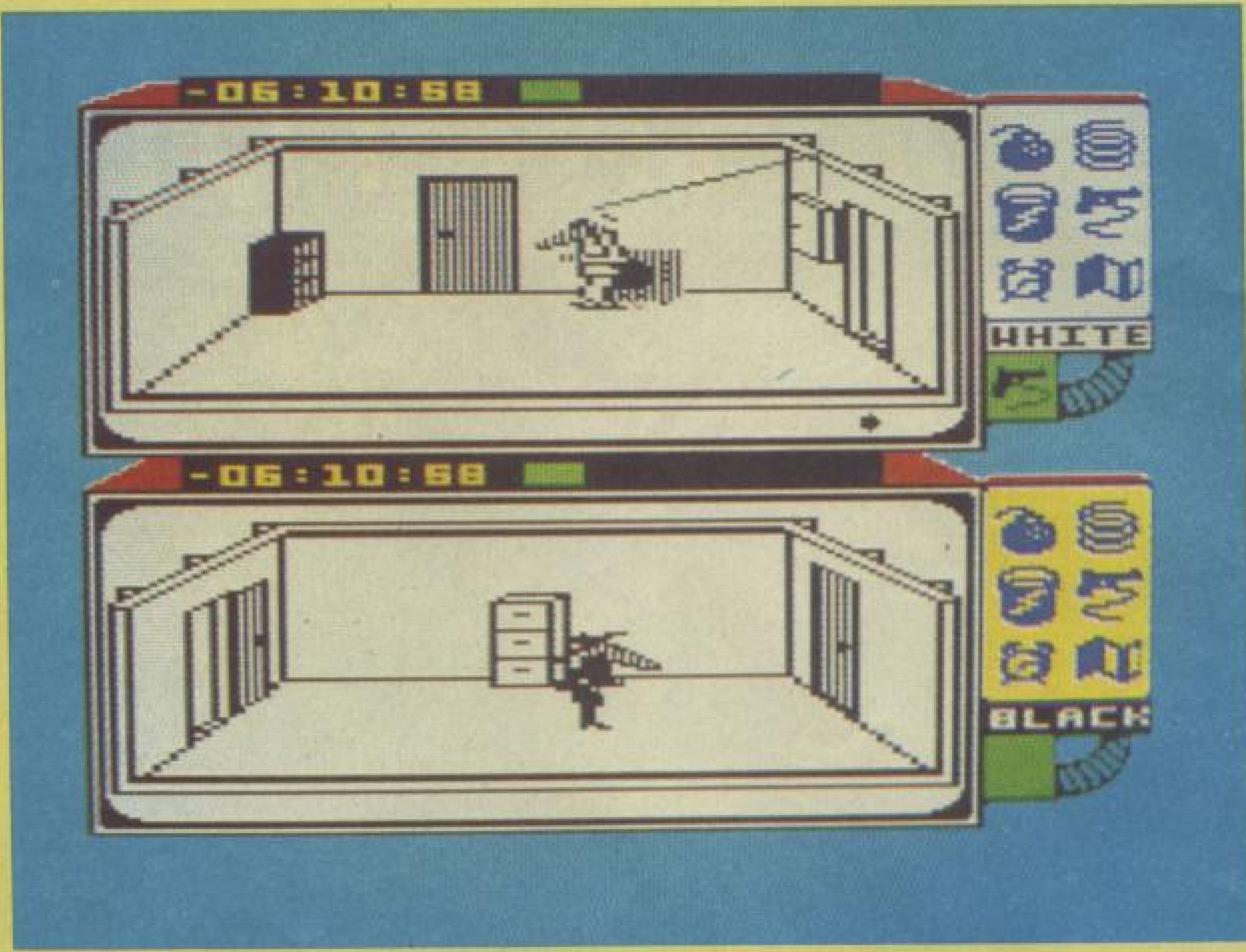
"All the excitement of a real Fishing match and you don't have to get your feet wet."...

'I believe Match Fishing brings a whole new meaning to computer entertainment joining up to 8 players in an atmosphere of friendly rivalry and competition. Combining the power of the computer, its memory and speed of action with the skill and excitement of Britain's most popular outdoor participation sport, Match Fishing is the first of its kind in allowing all players to participate at one and the same time. Computer enthusiasts, games players and fishing addicts alike, I'm sure you will enjoy the excitement as much as I do.'

Alligata Software Ltd 1 Orange Street, Sheffield S1 4DW Tel: (0742) 755796

A CRASH Smash

S•P•Y V•S



SPY vs SPY

Producer: Beyond
Memory required: **48K**
Retail price: **£9.95**
Language: **machine code**
Author: **Tag and the Kid**

At long last the Speccy version of this much loved CBM game has mysteriously materialised on my desk. *Spy v Spy* is a game based around the antics of that crazy duo from the esteemed pages of MAD magazine. The two spies, one black and one white, constantly battle for supremacy in the cut-throat world of espionage and general skulduggery. The game introduces two new concepts: *Simulplay* , which is a facility that allows two players to play the game together, each of them controlling one of the two spies; and *Simulvision* which is a little more novel. If the two spies are in separate rooms then the two rooms are shown on the screen, one above the other. However, if the spies are both in the same room, then only one room is displayed. Without this facility you would never know what the opposition was up to, and that could be very unhealthy!

The basic theme of the game is very simple. If you play against the computer, you play the white spy. You and the guy in the black mac are located in a building near an airfield, and the object of the game is to get out of the building and reach the plane waiting on the runway. You won't be able to leave the building until you find the correct door and you can't go through the door unless you are carrying four objects — if you try the security guards will get very nasty. Since you can only carry one object at a time you need to find a briefcase, which is also hidden.

Searching a room simply involves looking behind each of the fixtures and fittings; if an object is behind something then it will be added to your inventory when you look there. Finding the articles is one thing, keeping them is something very different. Your enemy also wants to escape and is equally desperate to acquire the means to do so, and the hunt is complicated by the fact that the spies can set traps for one another.

If the two spies are in the same room then you are unable to search or use traps, in which case you can either indulge in hand to hand combat with your opponent or leave. The advantage of the former course of action is that if you win you will be able to recover the other guys inventory, but of course you might lose. . . . This is where the game has a fairly strong strategic element. If, for example, you had failed to find any of the objects you could wait while the other chap does all of the graft and then ambush him — it could pay off.

To master the game you will have to learn how best to deal with your enemy. A little device called the 'Trapulator' is displayed on the side of each screen, which bears six little pictures, the first five of which are booby traps. Via the trapulator, you can use a bomb, a large spring, a bucket of water, a gun and string or a plain old time bomb with a 15 second fuse. The sixth 'icon' is a map which helps you find the objects you are searching for and must find in order to escape.

The traps must be set according to their type. The gun and string, for example, can only be tied to a door, while the spring or bomb can be left under any piece of furniture. All of the traps, except the time bomb, have remedies. A fire bucket will douse the fuse of a bomb while a pair of scissors will get you past the gun and string. The remedies are located about the building but they can also be moved around by picking them up and and dropping them in a different location. A good trap layer will make sure the appropriate remedy is not to hand when a trap is set. One important point to remember as you dash about setting traps: remember where you put them!

If you are playing against the computer, you can reset its 'intelligence' at the start of each game. A rating of five for the computer means the black spy is going to be pretty smart and probably set a lot of traps — on IQ one you are dealing with a dumb thug. And the environment in which the game is played can also be changed at the start of each game. The size of the building can be pre-set, with the smallest having only six rooms while the largest has thirty six rooms and a lot of hidden passageways to boot. Points are scored for giving the other spy a hard time eg. killing him. How many points rather depends on how you did it. Points are deducted for using the map as well as for being a victim. If you do get killed, though, you are going to lose a great deal more than a few points. First, unless the other spy is a real gorilla, you will lose the articles you have gathered and secondly you will lose time — that's very precious because the plane only waits for so long. You can still lose the game, even as you make for the exit, if the plane leaves without you.

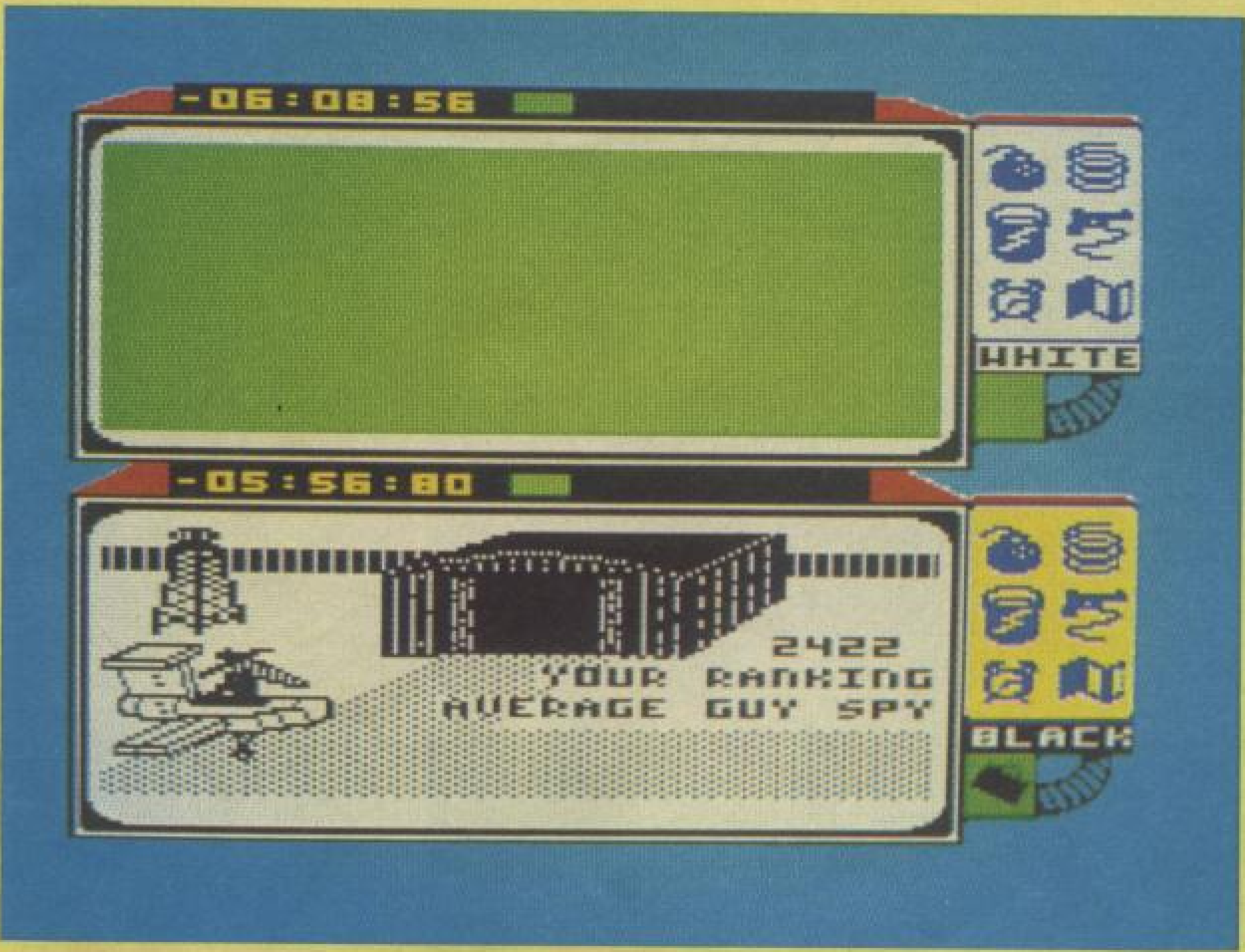
CRITICISM

● **'I can't remember when I've had so much fun playing a game. I think the immediate appeal of *Spy vs Spy* is that it is pretty easy to understand. Once you have learnt how to move, search and lay traps and you are off. There are so many degrees of difficulty that the novice is in with a very good chance of winning, but without a hope unless he is well practised. The scope for wierd and nasty tactics is immense. Let there be no doubt that bloke in the dark mac brings out the worst in me . . . it's as much as I can manage to keep life in perspective when playing against another person. I love it.'**

●*'To be honest* Spy v Spy *was one of my favourite games on the CBM (well, no one's perfect) and I wondered what the conversion would be like knowing the Speccys attribute problems. But then again it was being converted by Tag and the Kid. The main display has been produced in black and white, thus avoiding any problems but this does not detract from the overall feel of the game. The unique split screen system means that the game is instantly playable and addictive because there is terrific scope for games either against the computer or a friend.* Spy v Spy *is an excellent game which offers a pleasant change from all of those arcade adventures and shoot 'em ups.'*

● 'At first I found myself utterly confused by what appeared to be two separate events taking place on the one screen. It's very important to keep an eye on the other spy but it's also very difficult. The idea of setting an IQ level for the enemy is great since this allows you to play against a pretty thick opponent and work your way up to something a bit smarter than your average KGB goon. At first I thought the best tactic was simply to dash around

S•P•Y





the building setting traps and then picking up the pieces but as the building gets larger I tended to run into my own traps so I had rethink my policy a little. A very absorbing and highly addictive game.'

COMMENTS

Control keys: player 1 — definable; player 2 — N/M left/right, Q/S up/down, 1 to fire
Joystick: not Kempston
Keyboard play: responsive, a little complicated with two players
Use of colour: colour would have meant less detail in the main displays
Graphics: very good, very close to the original
Sound: aiding bleeps and bashing noise for hand to hand combat
Skill levels: 5 IQ ratings, times eight buildings gives forty levels of play
Lives: infinite within given time
Screens: depends on level
General rating: an exciting and demanding game, should last for yonks

Use of computer:	**96%**
Graphics:	**92%**
Playability:	**93%**
Getting started:	**89%**
Addictive qualities:	**93%**
Value for money:	**87%**
Overall:	**93%**

A CRASH Smash

H•Y•P•E•R S•P•O•R•T•S

HYPER SPORTS

Producer: **Imagine**
Memory required: **48K**
Retail price: **£7.95**
Language: machine code

Imagine continue their come-back with what could be called the real follow-up to *Daley Thompson's Decathlon*. *Hyper Sports* is the official Spectrum version of Konami's arcade game which followed in the footsteps of the highly original *Hyper Olympics* (or *Track and Field* as the Taitel/Konami version was called).

To *Track and Field* fanatics this scenario will seem very similar, but don't worry! *Hyper Sports* isn't just a test of brute strength like its predecessor, but involves timing and skill too. Each event has a qualifying time, distance or target, and to go onto the next event you have to qualify in the preceding one — failure to do so results in the termination of your game. There are six of the original events; swimming, skeet shooting, horse vaulting, archery, triple jump and weight lifting.

When you start a game you are given the familiar letter 'star' and you use this to enter your initials. Once you've identified yourself, you move onto the events, which commence with swimming. Smash the keyboard (or your joystick) to bits to get speed and when given the prompt, press the jump button to let your man breathe. If you don't he'll slow down, and if you press breathe at the wrong time your man will cough and splutter and REALLY slow down.

The swimming is reasonably simple and so is the next event, the skeet (or clay pigeon) shooting. Your man stands at the bottom of the screen with a shotgun while two boxes move up and down the screen, acting as sights. Shoot as many of the skeets that fly over by pressing either the left or right key as one passes through the corresponding sight. If you time your shot correctly then you hit the skeet. You have three separate attempts to qualify, and when you're successful your man turns, winks and gives you a big grin!

Next, into the gym and onto (or over) the wooden horse. Your man automatically runs up to the horse but you must time his jump onto the springboard correctly, using the jump button, for him to vault. Too soon and you won't get much of a jump; too late and he will trip up. Time the jump correctly and he will be launched through the air, to land hands first on the horse. When his body is horizontal press fire again and hit the speed buttons as fast as you can to make him somersault. Time the somersault so he lands on his feet otherwise he'll cartwheel along the floor or bounce on his head, both of which lose points.

After this comes the archery — one of the most difficult of the events. Pressing fire determines wind speed and then a target is winched down the screen which you have to hit. To do this allow for wind speed and let go of the arrow by pressing the jump button. Make sure your angle is as near to five degrees as possible and if you have timed right you will get a bullseye (worth 400 points).

Onto the triple jump now and it's all hands on the speed buttons. Zoom up to the line and press the jump button, trying to get as near to 45 degrees as possible. Repeat twice for the step and the jump and then wait

H•Y•P•E•R S•P•O•R•T•S

for the measuring. After three jumps you can progress to the final and the most strenuous round, the weight lifting.

This is a pound-your-Spectrum-keyboard-through-the-floor screen. First select the weight you want to tackle then it's off on a merry pound that'll bring tears to your eyes and quite possibly a nasty mess oozing from your Spectrum. Once you start the weightlifting you have to pound away until your man lifts the weight to his chest. When he has done this press jump to 'snatch' the weights and pummel away at the keyboard to keep them above his head. Once that is over you can go to hospital to get an organ transplant and come back to start the series of events again, only this time it's a lot harder with all the qualifying times upped.





CRITICISM

● 'A superb arcade clone with Imagine getting as close to the original as possible within the limits of the Spectrum. All the events represented here are very close to the original, as fans of the game will find out when they try out their arcade tactics. The graphics are excellent with few attribute problems and the colours are well used with nice use of normal and bright. The man is excellently animated as he swims, jumps, and shoots his way through the events. Sound is excellent too, with all the familiar noises of the arcade game which are superbly reproduced. The game itself is very addictive and as strength draining as *Daley's*, but this time your reflexes and timing are tested too, giving welcome breaks between bouts of keyboard destruction. A brilliant follow-up to *World Series Baseball* and one which shows that Imagine are well on their way back to the top.

● *'It's nice to see the name Imagine associated with good games again.* Hyper Olympic *the arcade hit, has now been Spectrumised. This version follows the original really closely, even down to the bird which flies across the screen when you get a maximum on the skeet shooting. Also like the real thing, the game is no piece of cake either. It's really frustrating having to go back to the start if the odd arrow is a couple of points of a degree out. Never mind, great game, just like the original.'*

● 'Being a lover of sports simulations, I was very pleased to hear that this great game was to be converted to the Spectrum, but I had doubts about what the quality would be like. I'm pleased to announce that this conversion is excellent. The graphics, of course, aren't as good as those seen in the arcade game, but with that said they are still pretty good. *Hyper Sports* is instantly playable due to its simple game style and it is quite addictive, as was *DTD*. There might not be as many events, but it is definitely a more slick and polished program. If you want a true-to-the-arcade-game copy, then this is the one to get. Another winner from Imagine!

COMMENTS

Control keys: definable
Joystick: any
Keyboard play: very responsive
Use of colour: brilliant, with nice landscapes.
Graphics: smooth, detailed, well animated with nice scrolling.
Sound: excellent applause, tunes and effects.
Skill levels: as you progress qualifying targets get smaller.
Lives: 1
Screens: 6 events.
General rating: excellent arcade conversion, one of the best yet.

Use of Computer	89%
Graphics	90%
Playability	93%
Getting Started	87%
Addictive Qualities	96%
Value for Money	86%
Overall	**92%**

·JONAH·
·BARRINGTON'S·

SQUASH

FEATURING *Reprosound*



A ll the speed and excitement of championship squash is now available at your fingertips in a game so realistic – you'll need a shower afterwards!

Written with the help of Jonah Barrington, former World Squash Champion, the game keeps to the International Squash Racquet Federation rules as far as is possible. You serve in a 3D glass-backed court to play against your computer, or, using the game's two player option you can challenge a friend.

There are 4 levels of difficulty, and depending how fit you are you can play 1, 3 or 5 game matches! Check your score with the on screen display, but as your eyes are too busy watching the ball, Jonah Barrington acting as marker calls out the score for you. All this is due to a programming breakthrough that enables your computer to accurately reproduce the human voice without any hardware add-ons!

The game also incorporates a User Defined Joystick/Keys option which means that you can set your keyboard to suit you, or play with just about any make of joystick.

So get in training for this high- powered action game now.

It's your service next!

FOR

Commodore 64
and all
48K Spectrums
£7.95

New Generation Software

GSH Guild of Software Houses

FREEPOST, Bath BA2 4TD. Tel: 0225 316924

New Generation products are sold according to their terms of trade and conditions of sale.

AT LAST! DESIGNE



Huff Puff, Pant, Wheeze, Coff . . . I'm sick of this.

'Oy You', bawled the arch meanie MD of Newsfield Ltd, *'Gerrof your butt, put on this tracksuit and leg it round Ludlow on a roadtest'*. The life of a competition minion is not an easy one.

There I was, snoozing after a couple of sticky buns for breakfast, minding my own business in the broom cupboard, when my dark peace was interrupted as Oli flung open the door and uttered those immortal words.

Apparently **CRASH** and **ZZAP! Graphics** are teaming up with **Gremlin** to bring you some designer running wear to celebrate the launch of Gremlin's latest game *Monty on the Run*. Cuddly trousis, together with super hooded tops so you can keep your brains warm while out jogging, will soon be available through CRASH mail order.

And no ordinary tracksuit this one, oh no. Available in a range of colourways (so long as it's pale grey) they have a delightful Gremlin Logo on the back and a few bugs sorting out the CRASH and ZZAP! logos on the front.

Oli had just finished designing the tops when he intruded into my mid-morning nap and insisted I road test the garments on your behalf. (*Gasp . . . splutter*)

from

ER RUNNING WEAR



Crash Competition

To get you in the mode of running, here's a few questions to answer:

1) Who ran the first mile in four minutes? A. Sebastian Coe, B. Roger Bannister, C. Steve Ovett, D. Your Competition Minion.

2) Who recorded an album called 'Band on the Run'? A. Ronnie Biggs with the Sex Pistols, B. The Beatles, C. Cliff Richard and the Shadows, D. Paul McCartney and Wings.

3) In cards, a run can be A. a number of cards in the same suit, B. a number of cards of the same denomination, C. a sequence of card in numeric order, D. none of these — something done by a losing gambler

4) How long is the course for a full marathon?

5) TRUE or FALSE: If your feet smell, does your nose run?

Jot your answers onto the back of a postcard addressed to MONTY ON THE RUN Competition, CRASH, PO Box 10, LUDLOW, SHROPSHIRE, SY8 1DB to arrive by 29th August. First twenty correct solutions out of the giant cardboard box we keep specially for such things, win their own Designer Tracksuit.

They work! A host of admiring stares helped me on my way up and down the hills and dales that surround this haven of peace, and I could almost take to jogging every morning. Well almost. In tests, I found the Monty Track Suits ideal for walking too — their roadholding was superb, upholstery comfortable and general finish and appearance well suited to a top of the range garment.

Normally available for the knock-down, special offer price of £19.95, Gremlin have sponsored this competition to mark to launch of *Monty on the Run* (which we've seen, played and think is dead good — look for the review next ish). Twenty track suits are up for grabs, delicately wrapped in real cellophane, and lovingly packed by our mail order department.

Gremlin!

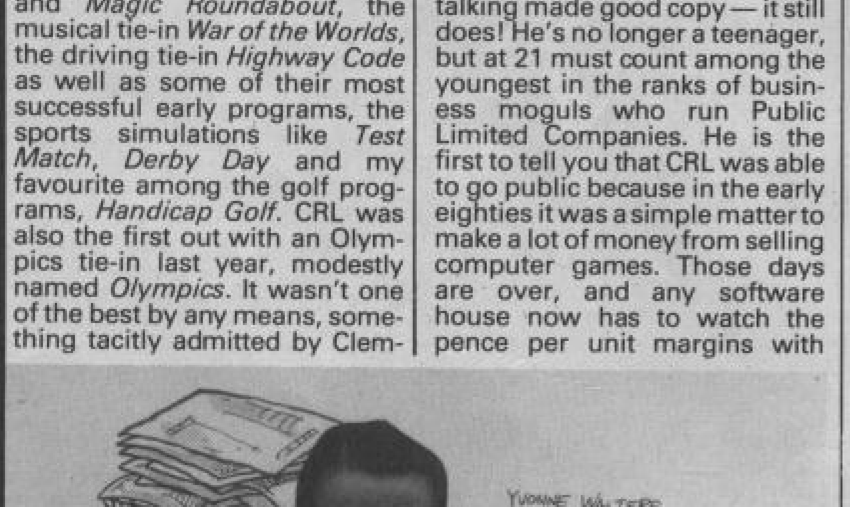


FROM CAVEMEN TO ROCKY HORRORS

Writing about the longer established software houses always brings our own short history to mind. I can very clearly remember sitting down with a list of games drawn up by Franco Frey to decide which we should order for the first CRASH MICRO GAMES ACTION mail order catalogue. One of the games quite high on the list was 3D DESERT PATROL by Computer Rentals Limited. The company has become better known simply as **CRL**.

CRL's list of software releases is impressive, their chart successes less so, but as a producer of games they have strenuously avoided a 'house style' and kept a low profile, which means that it's easy to forget the quantity of releases and the ones that were very good. Just look at the mixture; there was the 3D *Omega Run*, the terrible pair of releases *Caveman* and *Lunar Lander*, the attractive under water *Glug Glug*, the TV tie-ins *Terrahawks* and *Magic Roundabout*, the musical tie-in *War of the Worlds*, the driving tie-in *Highway Code* as well as some of their most successful early programs, the sports simulations like *Test Match*, *Derby Day* and my favourite among the golf programs, *Handicap Golf*. CRL was also the first out with an Olympics tie-in last year, modestly named *Olympics*. It wasn't one of the best by any means, something tacitly admitted by Clement Chambers when he says with some surprise that people still ring in asking for help on it!

CRL was founded by **Clement Chambers**, a young man who received a fair bit of media attention in the early days of the computer boom for being a teenage whizzkid. Perhaps the unusual photographs helped — 'I usually have me finger stuck up me nose when I'm photographed,' he said, but his easy-stream-of-conscious style of talking made good copy — it still does! He's no longer a teenager, but at 21 must count among the youngest in the ranks of business moguls who run Public Limited Companies. He is the first to tell you that CRL was able to go public because in the early eighties it was a simple matter to make a lot of money from selling computer games. Those days are over, and any software house now has to watch the pence per unit margins with extreme care.



The Chambers public image is one of attractive, slightly remote superiority, but it breaks down quickly enough in the office, especially when he tells you with some pride that for two years running he has won the Quick Byte Award for 'The Person Most Renowned in Computer Knowledge'. The byte in the tail being that these awards mean the opposite of what they say! Tongue firmly fixed in cheek, he describes himself officially as Managing Director and assistant programmer, which is to say he tests the joysticks each morning.

Recently, CRL has joined forces with another of the older software houses — Silversoft. It's a purposefully mysterious alliance, and when I asked about it Clement, who was sitting cross-legged on the office floor, sat upright, hummed for a moment and then in a 'press release' voice announced, 'You can describe us as Affiliated Companies and we wish we were half owned by US Gold . . .'

CRL House sounds impressive enough. Actually it is rather like a house, set apart from the other business premises in the East London industrial complex between Hackney, Bow and Stratford. Kings Yard is a quiet enclave in this vast area, surrounded by high walls and protected on one side by a canal. The two-storey CRL building houses the administrative offices of the company as well as the software development and programming areas.

On the morning of the day I arrived, Clement was fast asleep on the sofa in his office. There had been a burglary somewhere which had done something to the alarm system, so he had slept in the office as they had just taken delivery of a vast quantity of *Rocky Horror Shows* which were going on to Germany that day. Still rubbing sleep from his eyes, Clement led me upstairs to **Ian Ellery**'s office. Ian is CRL's Software Development Manager, 'The man who released *Caveman*!' Clement whispered in my ear as we went through the door.

Unlike his boss, 23 year-old Ian Ellery looked very awake, and confessed to me that he hadn't had any desire to sleep until *Rocky Horror Show* was safely released and on its way. As we sat down the phone rang with a call from someone who had just completed *Rocky Horror* and wanted to say how good it was. Ian asked me to take the phone and speak to him. 'It's brilliant!' said the young voice at the other end, 'It should be a CRASH SMASH!' The caller was 13 year-old Stephen Day.

'It's nice to get calls like that,' Ian told me. 'I get really nervous before a game comes out, and then — phew, it finally gets into the shops.'

Clement coughed and unkindly said, 'He thought he might have released *Caveman 2*!'

Moments later the phone rang again with an Andrew Murphy to speak to Roger Kean. It was Stephen Day's friend ringing to say that if Stephen got a mention, so must he, because they completed the game together.

To many people, Ian Ellery might be better known when he's wearing another hat, that of computer artist, author of many drawings and cartoons in various magazines, notably *C&VG*. Ian produced all the photo-drawing montages on these pages. He also designs a number of CRL's cassette inlays, and it is his artist's eye that keeps a careful watch on the games' graphics as they develop. He's an outspoken sort of guy, and managed to startle Clement momentarily out of his post-burglary lethargy by telling me that he doesn't like Oliver Frey's artwork in CRASH. 'That's how you go round making friends and influencing people,' Clement told him sharply.

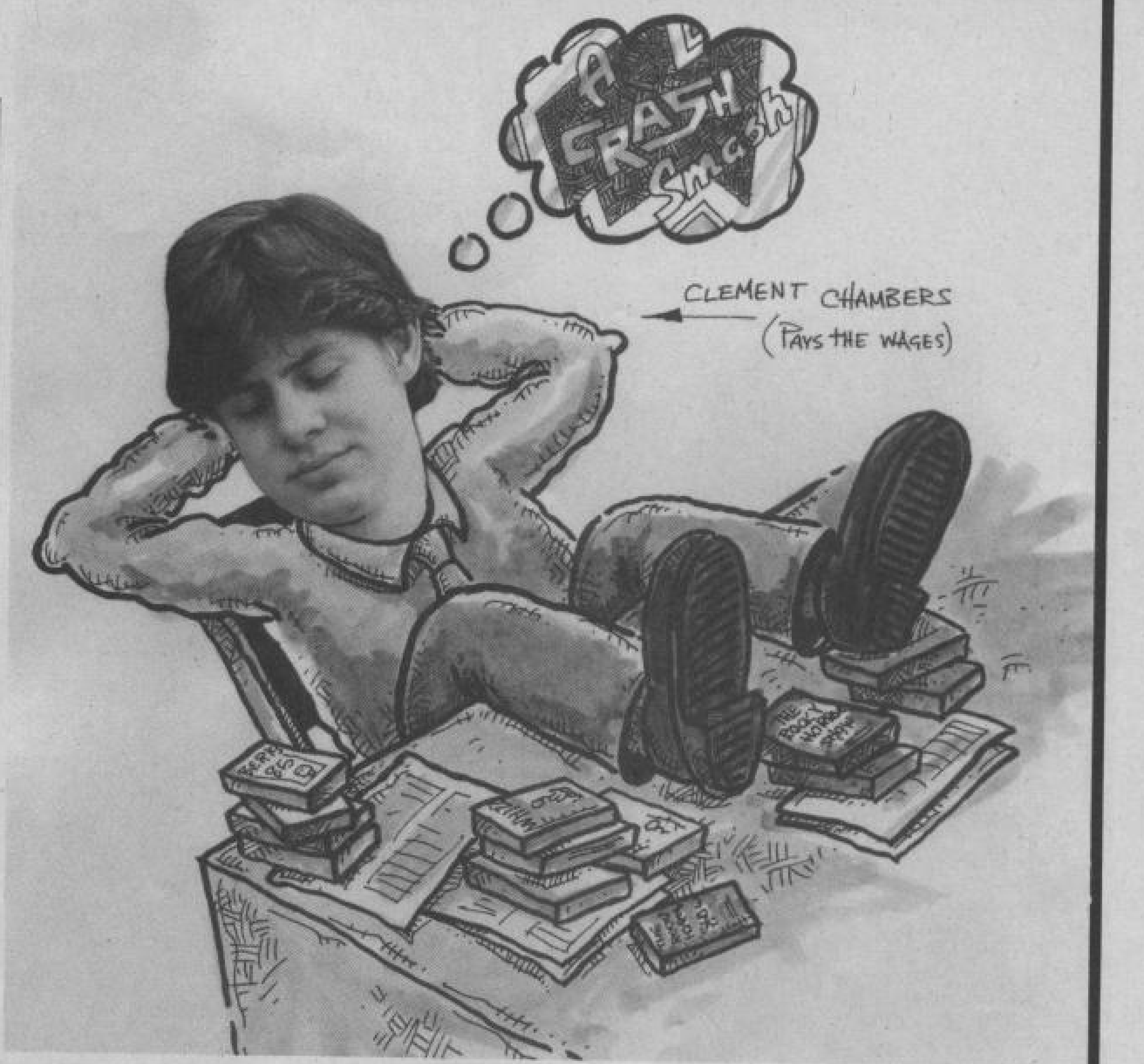
CRL has an in-house programming team who work on Spectrum, Commodore and Amstrad games. There's **Jay Derret** (17), graphics designer and programmer, **Andy Stoddart** (20), **Ian Foster (17) who works on both the Spectrum and the Commodore, and Jeff Lee** (18), who did *Rocky Horror Show*, although Jeff is giving up programming

to become a photographer (he took the photos for this article). **Richard Taylor**, who did CRL's famous *Hi Res* program (and *Rocky Horror* on the Amstrad), works with CRL but not as an in-house programmer.

Every company has to have its administrative back-up, which at CRL comes in the shape of **Yvonne Walters**, **Guy Spooner**, stock boss **Tim Vernon** and Clement's personal assistant **Belinda Carling**.

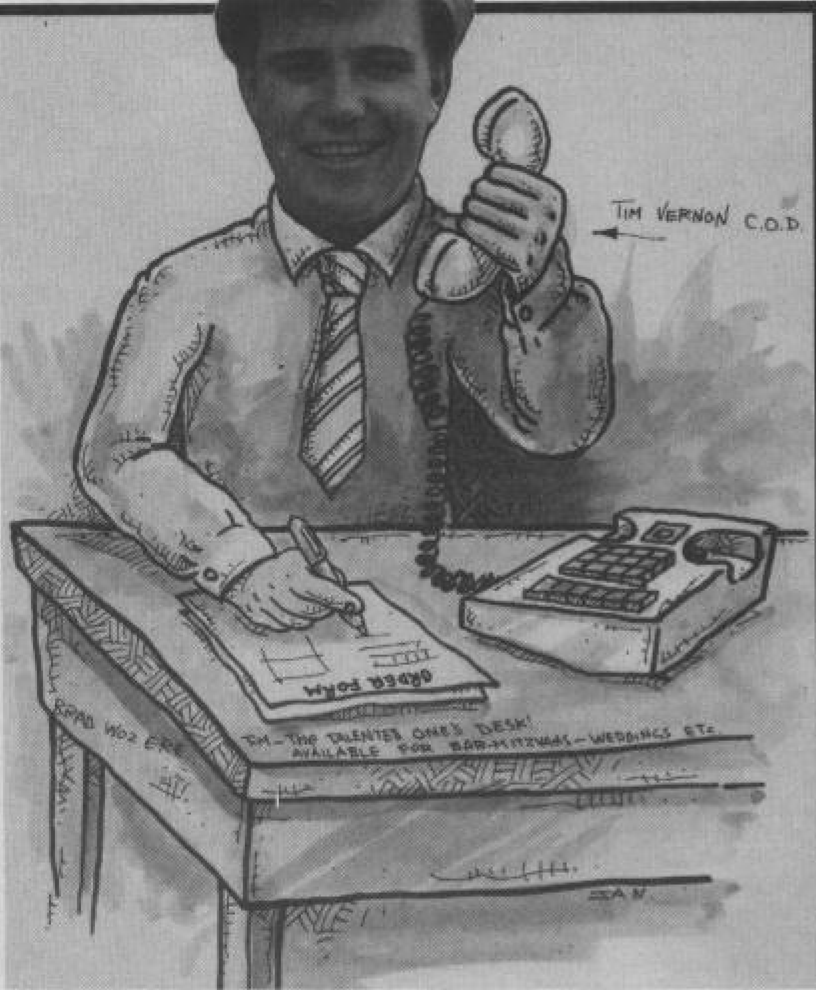
Belinda accompanied Clement, Ian, Andre Posumentov (Silversoft) and myself to a nearby Italian restaurant where, between discussions of whether the 'live lobster, split down the middle and grilled' would actually scream when it was split down the middle, Clement went into a stream-of-consciousness about the software industry and Ian Ellery told me about CRL's plans for future releases.

A lot of the programs in preparation are being worked up on the CBM 64 with Spectrum conversions being done on some of them. One of them, *Skyship 6000* (it's a working title) is planned only for the 64, but looking at the storyboard graphics (not unlike the 3D effect achieved by Vortex in *TLL* and *Cyclone*) I thought it would convert to the Spectrum rather well. It's a simulation based on the new British air ship and involves the player in ferrying goods and people between islands set in a rough and dangerous sea, while rescuing stranded sailors from their sinking ships. Another CBM only game which is on the 'semi-secret' list, so I won't say much about it, is *Blade Runner*. The kind of graphics involved look like the sort that might not travel onto the Spectrum too well, but we'll see. It's a 3D graphic adventure shoot em up, where you play Rick Deckard as he chases Nexus 6 Replicants through the untidy streets as they seek out the scientist who created them. One game that will definitely appear on the Spectrum is *Space Doubt*. The action takes place on a huge spaceship with animated backgrounds, and it has an unusual way of presenting the 3D. It's as though the ship had been chopped through in the middle so that each room you enter is seen like a stage set. Walking off 'the front' switches you into the other half of the room. There are null gravity lifts and room doors that slide up and down, but as most of the ship's workings have been badly affected by a space storm, their working is very erratic. The object (not unlike Silversoft's *Worse Things Happen at Sea*) is to get the ship and cargo safely to its destination against all odds, which include plenty of nasties as well as external influences. Through the various window ports the stars can be seen in movement, which tells you which way you are going as well as giving an





FROM CAVEMEN TO ROCKY HORRORS



indication of your orientation on the vessel.

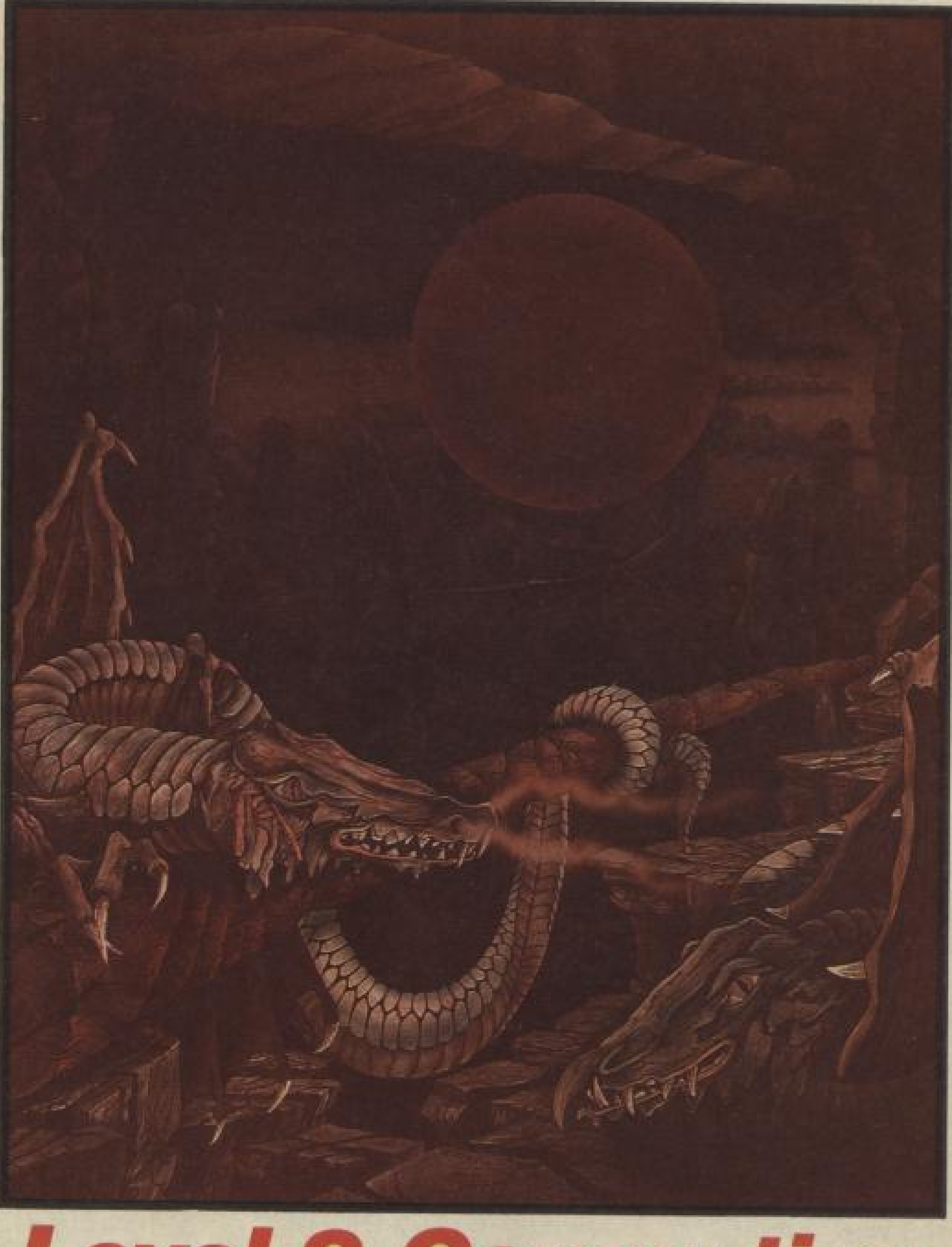
These games are intended for release along with other 'secret' projects in the pre-Christmas run up, and what with the in-house team hard at work and some licence deals being set up, CRL look like continuing their spate of releases for some time to come.

Not having heard any squeals from the kitchen, everyone settled down to their 'live lobster' with relish, much to the relief of the waiter who had already supplied Clement with a year's supply of Italian bread sticks to keep him going until the main course arrived. Under cover of the gunshot noises of cracking lobster claws, Ian Ellery asked for an art job on CRASH and Clement proved that big ears are what get you to the top. Still, I accepted Ian's offer to provide the illustrations for this piece, and after lunch everyone went back to the perennial worry of 'what next?' and I headed west for Ludlow.



NEW!!

Red Moon



Level 9 Computing

RED MOON MoonQuest fantasy adventure for most micros. The Moon Crystal of Xax supplied good magik for the honest rulers of the kingdom of Baskalos. Then it was stolen and the land fell into chaos. You must recover the Moon Crystal from the magik-rich castle where it is hidden, armed only with your wits and spells.

RED MOON‡ is a Level 9 adventure with over 200 locations. Amstrad, BBC, Commodore 64, MSX and Spectrum versions have 150+ pictures.

RED MOON is available now on cassette at *£6.95.* It joins Level 9s catalogue of acclaimed adventures for

AMSTRAD cpc464

ATARI 48k

BBC 32k

COMMODORE 64

ENTERPRISE 64

MEMOTECH 500/512

MSX 64k

SPECTRUM 48k

Here's what some reviewers have recently said about Level 9.

"the series of adventures which has (since) flowed from Level 9 is renowned for high standards of plot and literate description".
-Sinclair User, May 1985

"I'll be kept more than busy by the absorbing Level 9 adventures".
-MSX User, June 1985

"If only more adventure houses could achieve Level 9".
-Crash, May 1985

So don't forget our other great adventures:

COLOSSAL ADVENTURE★† *(cass £9.95)* The classic mainframe game with 70 bonus rooms.

ADVENTURE QUEST★† *(cass £9.95)* "A brilliant adventure that confirms Level 9's place as the ultimate adventure software house" -Computing with the Amstrad, May 1985.

DUNGEON ADVENTURE★† *(cass £9.95)* "A wonderful adventure..a world where electricty bills and mortgages have no place" -MSX Computing, June 1985

LORDS OF TIME★† *(cass £9.95)* An imaginative romp through world history.

SNOWBALL★† *(cass £9.95)* Immense science fiction game with 7000+ locations.

RETURN TO EDEN★‡ *(cass £9.95)* Popular SF adventure. Amstrad, CBM64, MSX and Spectrum versions have 240 pictures.

EMERALD ISLE ‡ *(cass £6.95)* Fantasy adventure. Amstrad, BBC, CBM64, MSX and Spectrum versions have 230 pictures.

ERIK THE VIKING *(cass £9.95)* Game of Terry Jones' book for Amstrad, BBC, CBM64 and Spectrum only. All with 180+ pictures.

Level 9 adventures are available from all good computer shops. If you can't find the game you want please ask them to order it.

You can also buy games directly from us. Just send us a cheque made payable to Level 9 Computing, or a postal order. Don't forget to tell us your address, which computer you have and which game you'd like. (Add £1 for each item if outside the UK.)

If you would just like a **FREE FULL COLOUR POSTER,** with more details of Level 9 Adventures on the back, please write to us enclosing a stamped, self addressed envelope at least 9" by 6". Write 'POSTER' above our address.

Please write to

LEVEL 9 COMPUTING
P.O. Box 39
Weston-super-Mare
Avon BS24 9UR

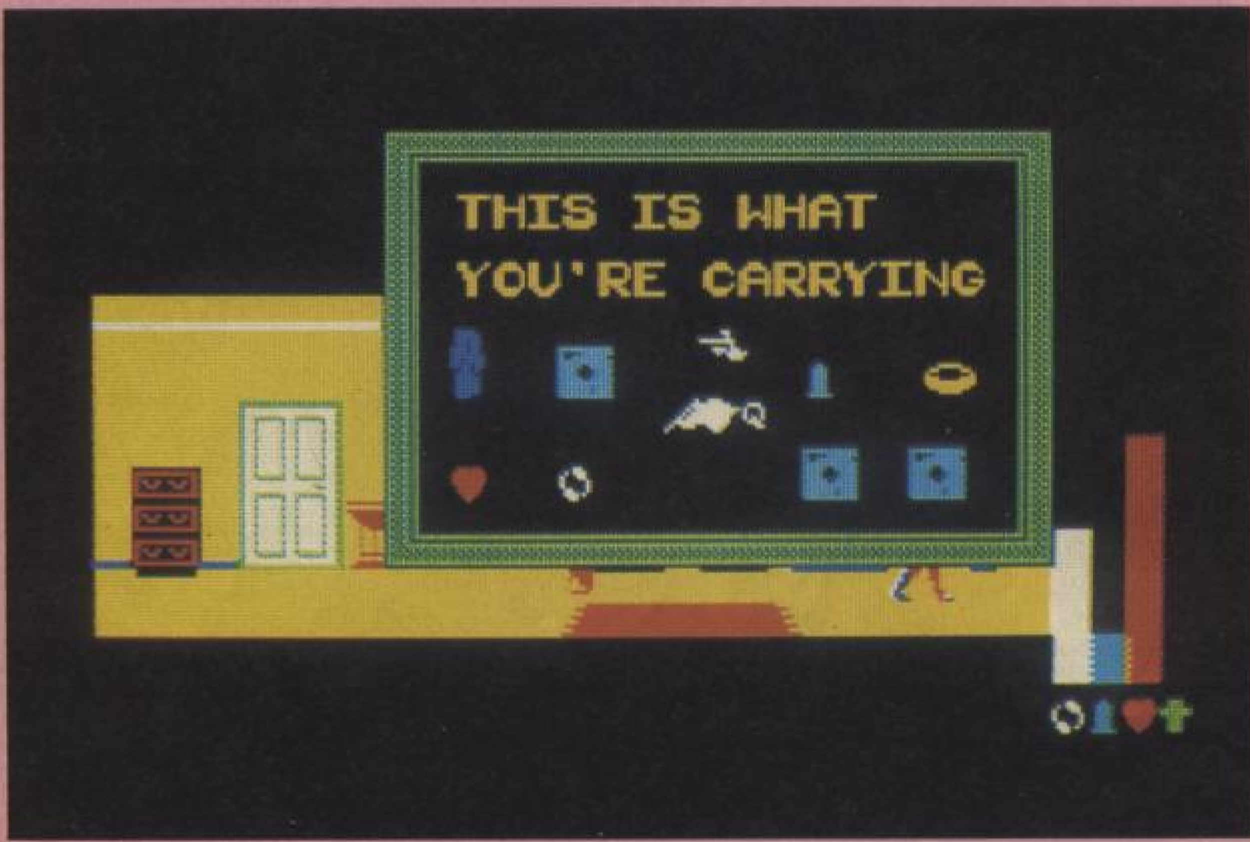
BBC (Acornsoft dfs)/CBM64 disk versions are now available for those games marked ★ at £11.95 new or £2.50 upgrade (please return your original cassette).

†Text adventure on all 8 micros. ‡ Selected versions have pictures in addition to text.

A CRASH Smash

F•R•A•N•K•I•E G•O•E•S

FRANKIE GOES TO HOLLY-WOOD



Producer: Ocean
Memory required: **48K**
Retail price: **£9.95**
Language: **machine code**
Author: **Denton Designs**

Frankie Goes to Hollywood was previewed at length in the June issue of CRASH (otherwise known as 17). A great deal was written about this game so a brief introduction should suffice.

It's not really fair to talk about targets or objectives in relation to *Frankie Goes to Hollywood* but at the end of the day your ultimate desire should be to reach the Pleasuredome. That's going to be a problem because at the start of the game you play a dull and drab character, one of the great unwashed who leads a life that is special only because it is so drab.However, this dreary lifestyle is shattered by the discovery of a murder.

Perhaps this single event can be the beginning of the re-awakening, an event so horrible that only a 'real' person would want to discover why? and who? To be a 'real' person (only real personages are allowed into the Pleasuredome) you must prove your worth by making the most of the opportunities presented to you in your drab world of terraced houses and Radio One disc jockeys. But the terraced houses of today are filled with elements of the electro-magical world, televisions, computers and, of course, the occasional murder. Within the drab ordinary houses you are offered the means to escape to the Pleasuredome.

Throughout the game you control a character (not Frankie, he has already been to the Pleasuredome) which can be made to walk through doorways and so into houses and rooms, and can also be made to reach out and touch objects. This reaching action is later extended in some of the games to a firing action. At most times the player is able to call up an inventory of the items collected so that they may be used if the situation demands. A bottle of milk can be collected and later given to a cat for instance; a key can be kept in the same way. The inventory is displayed on a sub—screen, which opens out rather like the iris of your eye to reveal a window in the main screen; a hand within the window can be moved about until it is positioned over the object required.

Whenever you do something tremendous, like feeding the cat, another window will open onto the screen giving Frankie's latest opinion on your performance in the form of pleasure points and an indication as to how how much of a 'real' person you have become.

While you explore the houses you must touch the objects within. The touching action can open everyday items like chests fridges and cupboards. Inside a fridge you may find a kipper or a floppy disc, these objects can be added to your inventory for future use but the number of items that can be carried is limited. You may find yourself forced to choose what to keep and what to get rid of. By touching other objects like a television or phone, you can sometimes open a doorway onto another level, when another type of 'window' opens on the main screen. If you decide to accept the challenge then move the character into the sub-screen, and it will expand to fill the whole screen and your character will be in a new location.

There are a number of mini-games incorporated into the main one, which are of a pretty simple format and are accessed by stepping into them. You may only have to bounce a pleasure pill through a tiny hole, or control Reagan while he spits at Andropov over a breakout-type wall. One game takes the form of a jigsaw puzzle; another requires you to solve a complex maze, yet another sub game requires you defend Liverpool by shooting German bombers as they fly over Merseyside.

For some sub-games you will need to have acquired objects, and in that sense there is a very strong adventure element. Pleasure points are awarded if you do well in the mini games, but if you lose or even decline to play at all by not walking into a windowed gamelet, then your pleasure rating will take a tumble. Failing to complete an element of the main game does not spell the end. This is a perpetual game — you will always get another chance because although you may have activated all of the 'events' in one room, sooner or later you will be able to go back and activate another, perhaps different event. The only problem that you will have to be wary of is using an object in an inappropriate place — if you do, you lose it and it may be some time before you will be able to replace it.

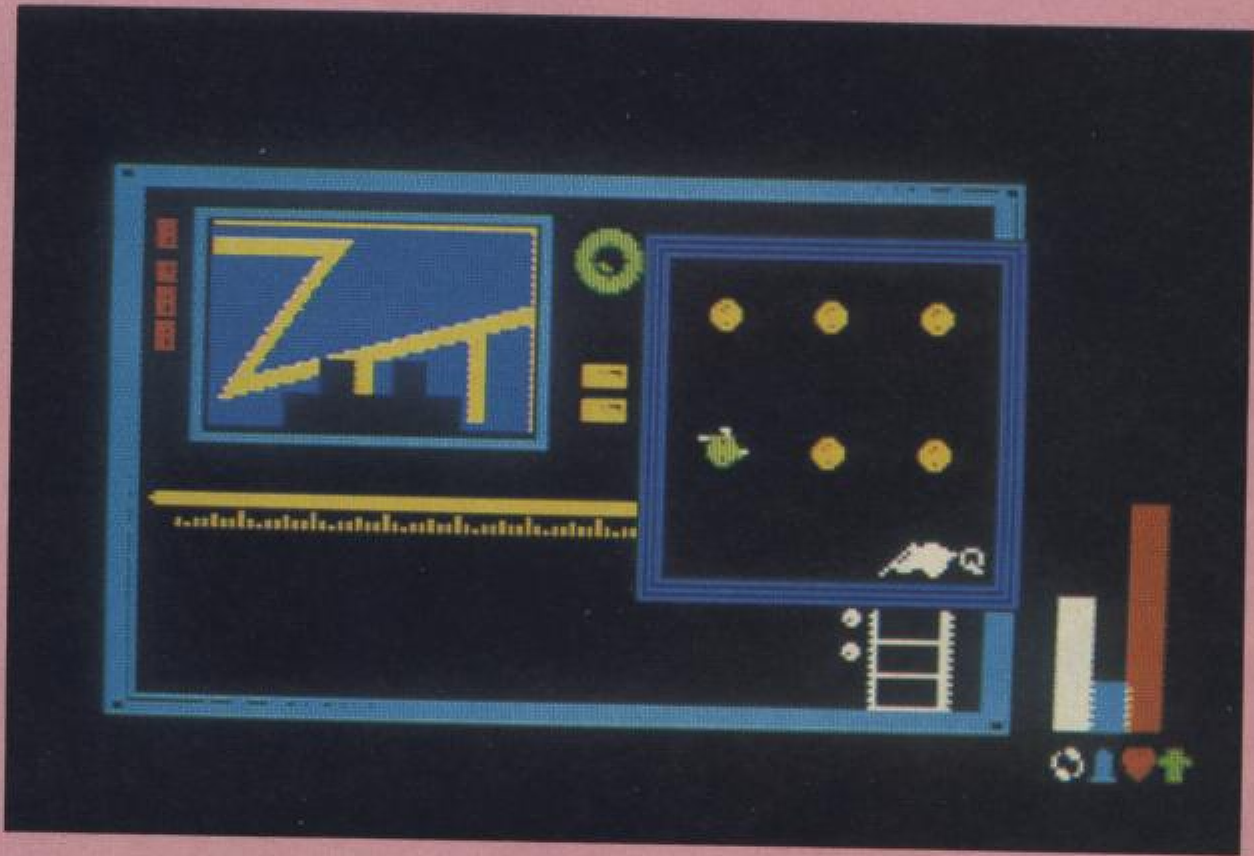
The game has many subtle features that can be easily missed. Associating the bottle of milk and the cat is one of the more obvious means of scoring some extra pleasure points. The intention of the player must be the achieve enough personality points to get to the Pleasuredome; only by doing 'good', playing and winning the games against evil and by solving the puzzles can you hope to qualify. Apart from the frequent reports from Frankie you can keep a check on your performance by looking at the four—bar graph on the side of the screen which shows how much of the pleasure equation you have managed to fulfill.

The game comes complete with an audio cassette which incorporates a new idea called Datatune. The player loads the game and then plays the audio cassette which will have music and a voice over describing how the game is played. Other music, a lot of it previously unpublished is included on the 'B' side.

CRITICISM

● 'At last, the long awaited *Frankie* game has arrived and it has been worth the wait. Even though it so happened my copy had little in the way of instructions I found the game pretty easy to get into; it is a very playable game. The graphics are, as

T•O H•O•L•L•Y•W•O•O•D



we have come to expect from Denton Designs, very good with plenty of attention paid to detail. I especially liked the room with Reagan and Andropov spitting at each other. The sound is limited to spot effects and a neat version of 'Two Tribes' before the game starts. *Frankie* looks set to be one of the best games this year with plenty of games and puzzles within the main game. I think it's immense fun to play and very addictive — a sure winner.'

● *'When I first loaded the game I was a little disappointed. The actual screen area is pretty small for the opening scenes of the game and the main character clashes a great deal with the background. However, after only a short time at the keyboard I grew to love the mystery of it all. I must confess to being anything but a Frankie fan even though some of the music appeals. I thought I would have a hard time understanding the game. Well I did, not because I don't understand the music it's simply that the game is very deep. What appears, at first sight, to be just a graphically neat game has a great deal under the skin and I am looking forward to being able to spend more time playing it. Great.'*

● '*Fun* doesn't begin to describe this experience. The initial impression is quickly bolstered by the seemingly never ending stream of new events. I have had the benefit of playing the game without the full instructions. It took ages to get an understanding of even the most elementary parts of the game but I don't resent a moment. The fun I have had just exploring it and enjoying the surprises that are waiting round every TV set! I understand that the game is to come with verbal instructions on tape, my advice is to throw it away (well at least don't put it on), JUST RELAX AND DO IT.'

COMMENTS

Control keys: definable
Joystick: any
Keyboard play: probably better than using a joystick
Use of colour: excellent once you accept the attribute problems
Graphics: very imaginative, excellent
Sound: limited but nice opening tune
Skill levels: one
Lives: no limit
Screens: over 124 mind-boggling locations
General rating: this is a highly innovative arcade/adventure that you must not be without

Use of computer	93%
Graphics	94%
Playability	93%
Getting started	95%
Addictive qualities	94%
Value for money	94%
Overall	**94%**





CRASH MICRO GAMES ACTION ORDER FORM

Telephone Ludlow (0584) 5620.

Please send me the following titles: Block capitals please! Subscribers - avoid delay - please fill in your code number!

Title	Producer	Amount
	Sub Total: £	
	Less Discount £	
	Total Enclosed £	

Name. . . . .

Subscriber No. if applicable

Address. . . . .

. . . .

. . . .

. . . .

Postcode . . . .

SPECIAL DISCOUNTS

£1 OFF ANY ORDER WORTH MORE THAN £20

50P OFF ANY ORDER WORTH MORE THAN £10

Sorry – only ONE voucher per order!

All prices are as quoted under review headings and include VAT. Crash Micro Games Action make no charge for postage and packaging. Customers in Europe should add 50p per item for post and packing. Outside Europe, please write first so that we may advice on postage rates.

Please make cheques or postal orders payable to 'CRASH MICRO'. From Europe we can accept Sterling cheques or Girocheques.

CRASH MICRO, FREEPOST *(no stamp required)*, **LUDLOW, SHROPSHIRE SY8 1BR**

ADVERTISEMENT

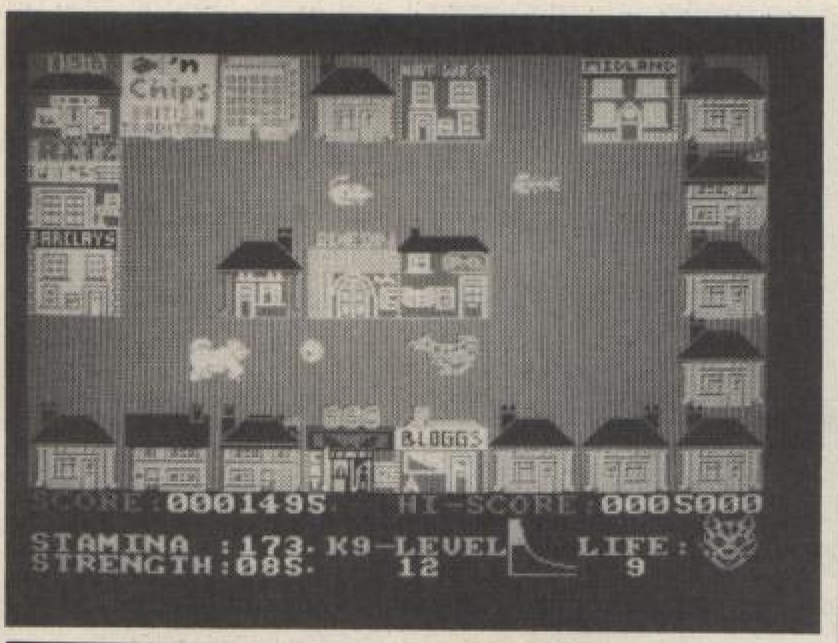
PAWS

Producer: Artic
Memory required: **48K**
Retail price: **£6.95**
Language: **machine code**
Author: **various**

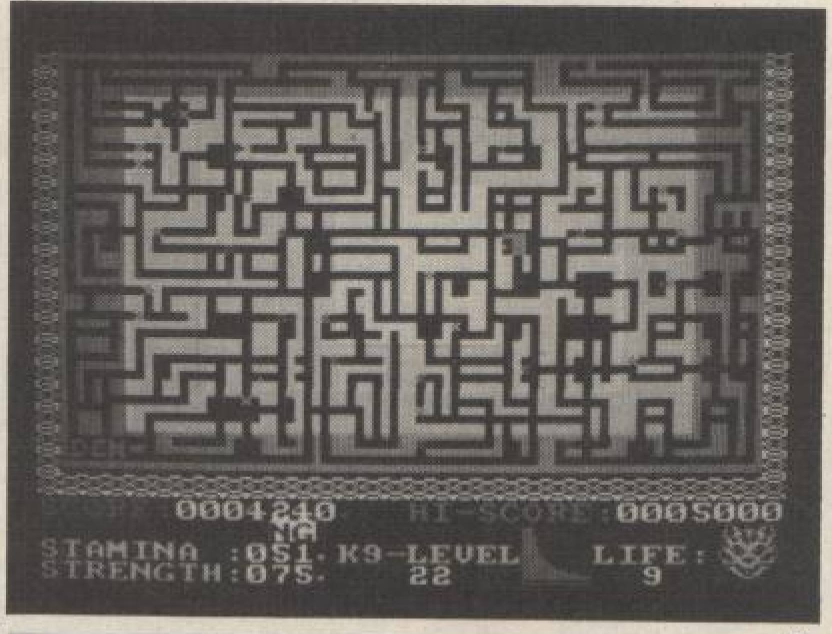
Before you jump up and down in fits of excitement proclaiming that this game was reviewed months ago, in another Spectrum mag (which, for the sake of your health at least, you should not be reading) we should point out that the other mag is better known for being rash at the expense of accuracy. CRASH at least decided to wait until Artic had settled on a name for the game.

Paws is about a poor little cat called Selwyn who is being harrassed by Bull Dog Billy and his gang of Bully dogs. Up until now, nasty old Billy has never managed to rid his patch of Selwyn because the cat and kittens were protected by catoplexic energy, a force generated by them as a whole. Well, imagine Selwyn's surprise when he returns home to find that the kittens have strayed. 'Oh this is awful', cries Selwyn, 'without the kittens we are no longer protected from the dogs and when they get to hear of this they will be after me again'. Well it goes without saying that Billy hears the news and barks an order to one of his lackies, 'Gruff', says he, 'round up the boys and we can get rid of those cats for ever'.

Your task is to guide Selwyn round the maze of city streets, the suburbs and refuse tips, collecting the kittens one by one and returning them to the haven. As you wander the lonely paths you are bound to come across the dogs. You can attack by firing fur balls at them, or even paralyse them for a while by depositing a noxious substance in their path. If you do get caught by a dog them a paw-to-paw fight will follow and that will cost you a great deal of energy. Your stamina, needed for the fur balls, and energy can be built up by eating different objects as you make you way around the maze, but the more you travel the maze the rarer the food becomes. With ten kittens to recover you face a race against time: soon the dogs will form a pack, and then watch the doggies get the moggies.



Furball in mid-flight, Tibbles fights back in PAWS.



The map screen from PAWS, showing where you are, where you should be and the route you need — it's up to you to get there, past the marauding doggies.

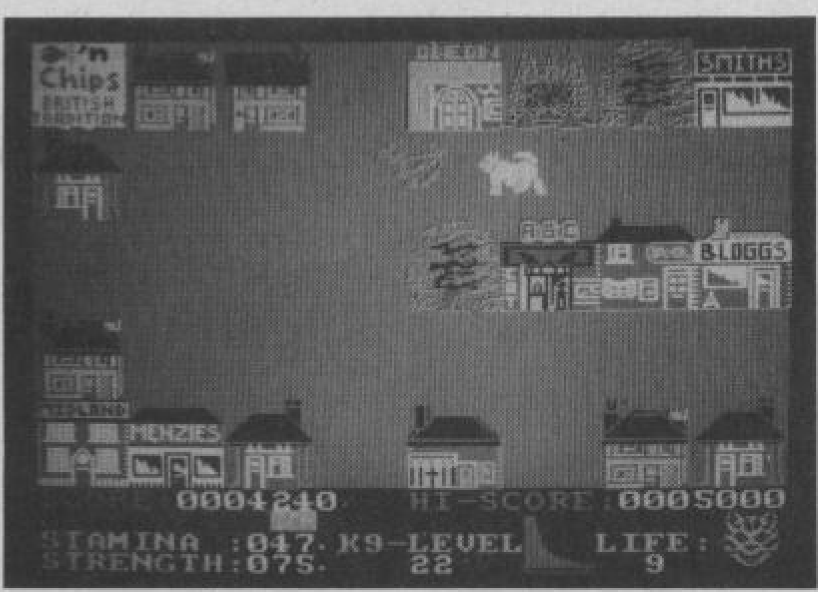


To help you with your task the game provides a map of the maze giving the locations of the kittens, the dogs, home and of course Selwyn. Underneath the main screen your score and high score are displayed, together with the levels of stamina, energy and the number of lives remaining. You lose a life when you run out of energy and if you are carrying a kitten you will lose that as well. The last figure on the screen gives the 'K9' level, this is a measure of pack formation and is, in effect, the time period in which you must collect the kittens. The five different skill settings simply give five different pack gathering rates.

CRITICISM

● 'It's no use pretending anything else, Artic wanted to call this game 'Cats' and base the scenario around the stage play. It used to have great music but even ignoring that it seems to have lost a lot more besides. It's a graphically pleasing, well animated, race-against-time maze game, and not a bad one at that'

● *'A pretty straightforward idea this. The graphics are nice, detailed and colourful. The map adds a great deal to the game and the dogs are a constant menace. To win you really have got to get your skates on to collect all ten kittens before the dog pack forms. The food idea seems a little banal at first until you realise that by racing round*



Seeing off Fido, the action packed cat zooms down a High Street in PAWS

the maze the supply runs a little thin. Good fun.'

● '*Paws* has Sabre Wulf-like graphics, bright colourful and well detailed. Playing the game seems quite easy and doesn't pose any real challenge once you've mastered the different aspects of the game. With the useful map provided on screen at any time life isn't too difficult when it come to finding your way around the large maze. I like the idea of the maze taking place in different zones, which are indicated on the map by different colours. Quite novel really. Your weapons are different to say the least — you can zap the dogs that are after you, or lay them off your trail be depositing a pile of . . . well, it's a pile of something or other! Quite an enjoyable game, but I think the effect of it will wear off after several hours of playing.'

COMMENTS

Control keys: Q/A up/down, O/P left/right, bottom row to fire
Joystick: Kempston, Sinclair and cursor
Keyboard play: fine
Use of colour: very good
Graphics: pleasingly detailed
Sound: a little garish
Skill levels: five
Lives: nine (of course) **Screens:** over 150
General rating: an attractive and mildly challenging game

Use of computer	**73%**
Graphics	**75%**
Getting started	**74%**
Addictive qualities	**77%**
Value for money	**71%**
Overall	**78%**

CHARLIE AND THE CHOCOLATE FACTORY

Producer: Hill MacGibbon
Memory required: **48K**
Retail price: **£9.95**
Language: **basic and machine code**
Author: **Soft Option Ltd**

The five games included in this package are loosely based on Roald Dahl's best selling children's book of the same name. The literate among you may well remember the story that went something along these lines . . . The owner of the local chocolate factory was getting near his time and wanted to find a successor to take over the factory. He sent out five little coupons inside 5 bars of chocolate and then told the world. Well, everybody went bananas and started buying lots of chocolate, everybody except Charlie because his family could only afford one bar. Anyway, to cut a long story short, Charlie got his voucher and went with four others on what they thought was just going to be a day trip.

The five games each relate to the five voucher winners, Charlie, Augustus, Violet, Veruca and Mike. All of you will know that all of the others perished (for a while) due to a combination of nosiness, greed and gluttony. Charlie, being a kind-hearted sort, has taken on the challenge of rescuing his foolish companions.

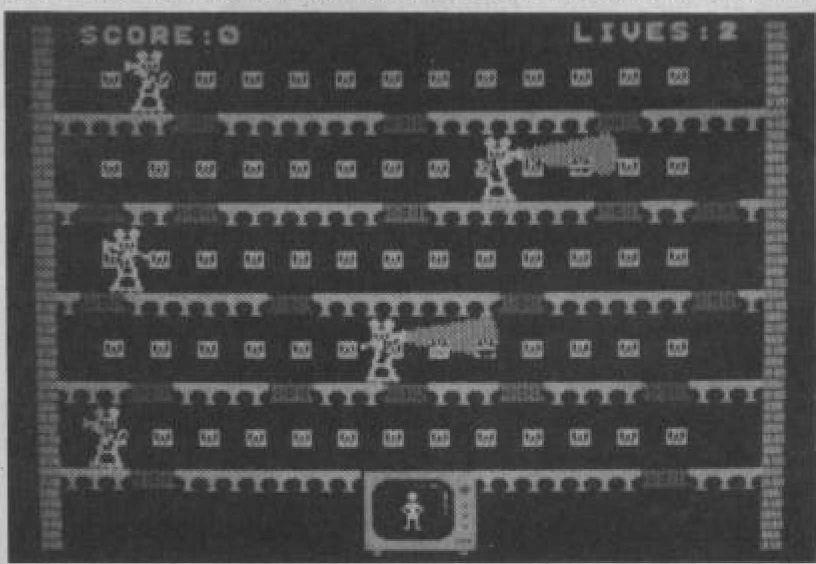
The game on side 'A' is divided up into four parts. Each one is a single screen arcade game relating to the events surrounding the demise of Charlie's four companions. *Augustus Gloop* is trapped inside a network of pipes and you must guide him to the bottle by closing off sections of the pipe. *Violet Beauregarde* is having a bad time with a load of blueberries. The berries are raining down from above and you must deflect them into the juicing machine. Only when the vat is full will she be safe. *Veruca Salt* has upset the squirrels and they are after her blood. The only way she can avoid being caught is to poison them all by placing poison nuts in their path. Careful though, the poison only has a very short life. Meanwhile *Mike Teavee*, the nurd, is trying to pinch all of the Wonka bars off each of the five platforms in the warehouse. Not in itself difficult, except that the cameras are after him firing their lethal shrinking ray. Being able to hop on the inter-platform lifts may not be enough to save this wally. . . .

The fifth game, which is loaded from the 'B' side, is the final part of the story. If you are successful in the first four games you will be given a code which allows you to play the main game for real, otherwise you'll be stuck with the practice mode. Charlie's objective is to collect the six gold keys which will allow him into the glass lift. To do this he must work his way through 43 screens avoiding being squashed by platforms, sweets, marshmallows and the like.

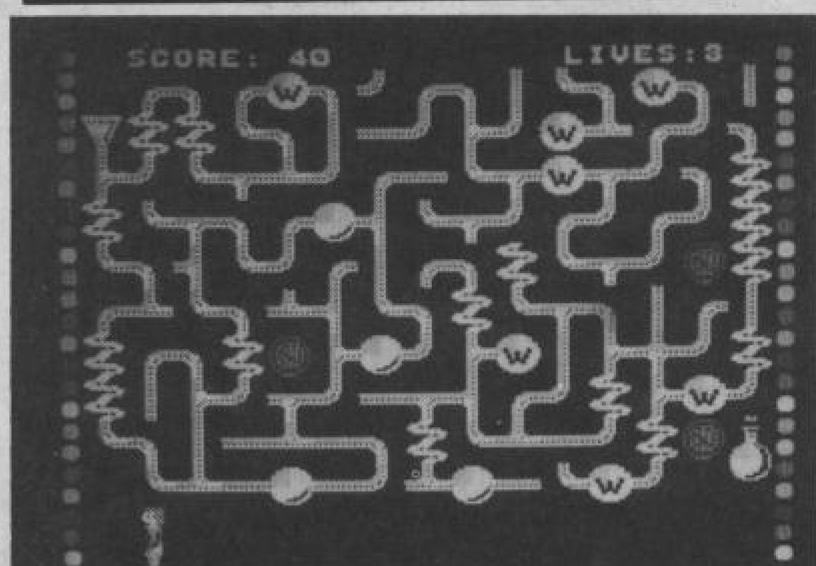
And they all lived happily ever after. . . .

CRITICISM

● 'When I received my copy of *Charlie and the Chocolate Factory* I thought that it might be something a bit special. The packaging was excellent, including a free book. But what a disappointment! The graphics on both sides of the tape are very flickery and do not flow at all, although the colour and sound



Killer Cameras chase the naughty person, in a screen from CHARLIE AND THE CHOCOLATE FACTORY. It's your job, as the nice Charlie, to rescue the miscreant.



A Squiggly Wiggly screen from CHARLIE AND THE CHOCOLATE FACTORY. Who on earth does the plumbing in the Wonka Bar factory?

brightened things up a little. The keyboard selections were not very good and, to make matters worse, the game did not respond well to keyboard play. I am sorry that for £9.95 the games did not do justice to the packaging.'

● *'You might think that almost a tenner for a game is quite a lot. Some people moan about Ultimate's prices but they do produce rather good games. This package includes four arcade games and a sort of arcade adventure as well as a book. The arcade games are not at all special. While the graphics are reasonable the games are not very playable. The graphics in the adventure are OK but again not inspired by any means. The game itself is pretty hard — perhaps too hard, because I think if this game has any appeal at all it must be to the little ones.'*

● 'I didn't like any of the games presented in this package. The standard of the graphics and the sound is poor. The graphics are jerky and hard to follow. I found it very hard to move the characters in any of the games, probably because the keyboard responded so badly. If I had to pick one out of the games it would be *Augustus* because it was pretty original. A shame that what looked like being good value turned out so badly.

COMMENTS

Control keys: 6/7 left/right, 8/9 up/down, 0 to fire
Joystick: Kempston
Keyboard play: poor response
Use of colour: pretty tatty
Graphics: dated and slow
Sound: nice tunes
Skill levels: one, with practice mode for the fifth game **Lives:** between three and twelve
Screens: total of 47
General rating: a bit of a disappointment

Use of computer	58%
Graphics	61%
Playability	58%
Getting started	63%
Addictive qualities	52%
Value for money	50%
Overall	**63%**

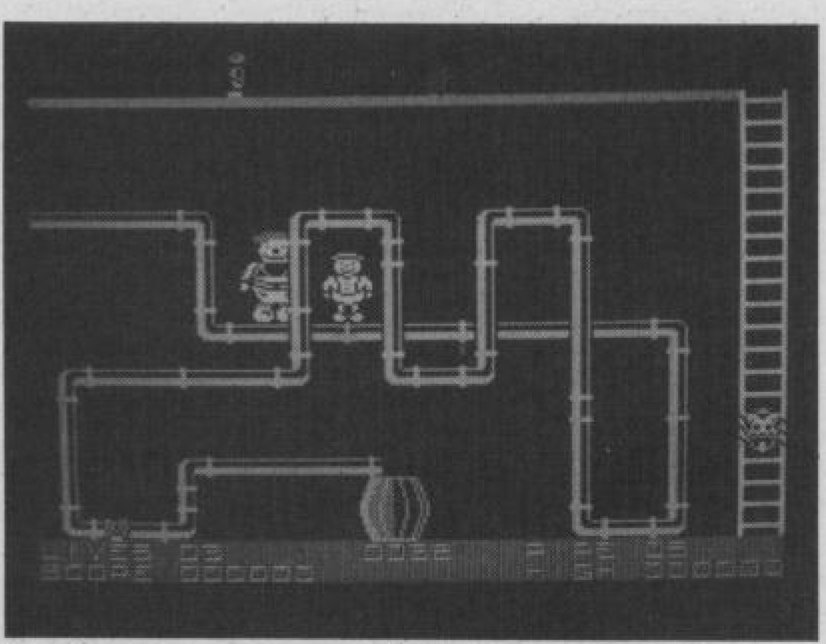
PIPELINE

Producer: CSM Ltd
Memory required: **48K**
Retail price: **£6.95**
Language: **machine code**
Author: **Simon Ffinch**

This is in effect the Speccy version of the original Commodore pipeline game produced by Taskset. This conversion, produced with the co-operation of Taskset, makes only two minor changes to the original: instead of the foreman firing bullets at the foe he throws spanners; and there are two more screens to entertain you. The game also comes with an improved version of an old arcade favourite. *SOS* is the game where you have to guide a module down to the planet surface to rescue the folks and then return to the mother ship. Both journeys require you to dodge the streams of space debris and the laser blast from the nasties.

In this version of *Pipeline* you control a foreman and one workman. Your one and only task is to make sure that the flow of petrol to the barrel underneath the network of pipes is not interrupted. The one little pest who seems determined to make sure the flow is stopped can be seen running up the ladder onto the gantry above you. From above he will drop objects that will damage the pipe so you must either kill him by throwing a spanner at him or simply dash around the network, with workman in tow, so the damage can be made good. Your task will be made a great deal easier if you bash the anarchist as often as you can, but you are likely to be distracted by the ladybird-lookalike pipe bugs. These bugs also use the ladder and once they are above you can drop down onto the pipe — you must knock them off, because if they reach you it's curtains for certain.

An impressive array of difficulties has been programmed into the game. To begin with there are eight different pipe structures, each one more complex than the one before. Three skill settings allow you to select how many attacks you are going to suffer from either the anarchist or the bugs. Finally you can select how many lives you would like to be allowed for each game, any number between one and eight. Select any but the easiest pipe system and you are going to be in for a nasty surprise in the shape of a well armoured and very persistent lobster.



A grinning workman and a grinning foreman in PIPELINE CSM's official version of the Taskset Commodore game. Keep that fluid flowing Floyd . . .

CRITICISM

● '*Pipeline* is quite an original game which has good graphics. The pipe menders are rather funny to look at but I suppose the looks go with the job. Unless you start throwing spanners at the other man to begin with, you land yourself with an almost endless task. This is a pretty good game. I enjoyed it.'

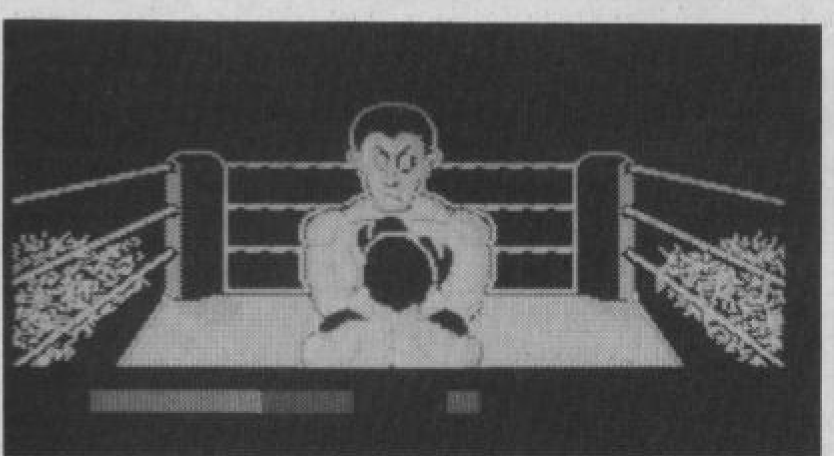
● *'I have played* Pipeline *a lot on the CBM so I was pleased to see it out for the Speccy. Initially I was a little disappointed because this version is a good deal slower and so became monotonous after a while. The graphics are large, jolly and very well drawn but the sound, as usual, isn't very good — though adequate. After about half an hour I had managed to perfect a simple routine to get me through most of the screens. To start with I enjoyed this game a lot but it does tend to get boring after a while.'*

● 'Until I reviewed *Super Pipeline* I had never seen a game like this. This version could have been a lot better with only a few modifications, an increase in speed for a start would have gone some way to making it as exciting as the *Super Pipeline* game. I did find the repeating cycle of pipe systems a bit too much towards the end. However having said that when you consider the game on the 'B' side which really is pretty good I think the cassette is good value for money.'

COMMENTS

Control keys: Z/X left/right, K/M up/down, L to throw
Joystick: Kempston and Interface II
Keyboard play: very good
Use of colour: not extravagant but clear
Graphics: very neat
Sound: spot effects only
Skill levels: three
Lives: up to eight
Screens: eight
General rating: slightly above average

Use of computer	74%
Graphics	74%
Playability	68%
Getting started	76%
Addictive qualities	63%
Value for money	75%
Overall	**76%**



ROCCO

Producer: Gremlin Graphics
Memory required: **48K**
Retail price: **£6.95**
Language: **machine code**
Author: **Dinamic and Armid**

In the last issue of CRASH we reviewed a boxing game from Alligata called *Knockout*. Well in this issue we have two more, *Rocco* (originally released under the title *Rocky*), which owes its origins to a team of Spanish programmers, and Elite's *Frank Bruno's Boxing*. There must be something of a trend under way.

The graphical presentation of the fighters is very important in this type of game. In *Rocco* you view the action from a point behind your fighter who appears to be a good deal shorter than your opponent. Both figures are solid and shaded. As a fighter, you have four basic moves available: a left and right head punch, and a left and right block. Every time you land a punch on your opponent you can see his head reel with the blow and his energy bar diminish a touch. A fighter is knocked out when his energy bar reaches zilch. The winner of a round is the first boxer to drop his opponent thrice. Each time one of the fighters is knocked out he will get up again (unless it was his third fall) and continue the fight with a re-charged energy bar — the other fighter continues with his energy at the level it was when he laid the other guy out. In effect, this means that a boxer who has just been knocked out has the advantage over his opponent.

Once you've won your first round you'll have had a taste of what is to follow, but to achieve ultimate victory you must defeat all four fighters. Each one is harder to beat than the one before. At the start of each new fight you are presented with a picture and the weight of your opponent displayed in a box under his energy bar. The graphical figure in the ring does not change in appearance from fight to fight. When you lose against any one of the fighters then the game is over. No score is given, so if you find you have a score to settle, you must start from the beginning.

CRITICISM

● '*Rocco* is the second boxing game I have seen this month. Looking at this one in isolation I think the graphics are very appealing. However, I think it lacks playability not only because the opposing character never changes, but also, on account of the limited number of moves available, it all became so repetitive. On it's own an original game but compared with *Frank Bruno* I don't think there is as much of a game here.

● *'At first sight I must say the graphics in this game won me over. They are very good indeed. The figures are large, detailed, and move well. But the game itself I am not so keen on. The actual game it is far too limiting. It's a shame that despite the other four contenders being gradually better they each take on the appearance of a black-eyed Spaniard! The movements available in a fight are just too limited, especially when you look at other fighting games,* Way of the Exploding Fist *on the CBM for example, and realise just how involved you can become. One more point: I don't recommend the use of a joystick with this game, it's just too tempting to sit there and wiggle it about.'*

● 'Yet another boxing game. We seem to be inundated with them here at CRASH at the moment, and I don't think any of them are particularly good. The novelty of them wears off after a few goes and you are left with nice graphics and a pretty boring game. Anyway, back to reviewing *Rocco*. At first sight this boxing game seems to be reasonably good. It has fair graphics and even a bit of sound every time you get belted, but after a few goes it turns into a 'slugging match' with no other option. All you can do is hit the bloke in front of you in the face with either your left or right fist. When you have beaten your first opponent, you are presented with a different picture at the bottom of the screen but the actual character you're fighting doesn't change at all, which I think is a bit of a cop out.

COMMENTS

Control keys: 1-5/6-0 left/right punch, Q-T/I-P left/right block
Joystick: Kempston
Keyboard play: better than joystick
Use of colour: very little
Graphics: solid, detailed and pleasing
Sound: a sort of squidgy sound for punches and a good bell sound **Skill levels:** four
Lives: three
Screens: N/A
General rating: a good attempt but doesn't quite make it

Use of computer	60%
Graphics	79%
Playability	62%
Getting started	70%
Addictive qualities	68%
Value for money	68%
Overall	**70%**

THE COVENANT



Producer: PSS
Memory required: **48K**
Retail price: **£6.95**
Language: **machine code**
Author: **Paul Hutchinson**

The name *Covenant* refers to a long lost parchment which carries the entire cultural record of a long dead people, a race whose once proud members have now mutated and been scattered, along with fragments of the Covenant among the 256 caverns of a subterranian horrorscape contained within a planet. You are the last survivor of the race, and as such it is your duty to find the 64 pieces of parchment and restore the knowledge that it bears. You must also gather the poor miserable mutant creatures from within the caverns, so that when you have the complete parchment the planet surface can be repopulated.

Alone you may be, but unaided you're not. Your equipment includes a globe (for getting about in) and a stun gun. Now it may seem odd that the wretched creatures you are trying so hard to rescue need to be stunned, but it's safe to assume that at this stage they have no idea what you are up to — so they tend to regard you as an enemy. The globe itself isn't a bundle of fun to manoeuvre — its movement is designed to mimic that of submerged bodies, ie awkward. Whenever you or your globe come into contact with a creature energy will be drained, so the first task in any cavern is to stun the creatures within and take them on board by manoeuvring your craft over them.

The whole cave system is divided up into blocks of four rooms. Each area has a key, a piece of the Covenant and some anaesthetic. Get the anaesthetic for the stun gun so you can capture the critters, which you must do, because you can only move into the next area when they've all been rounded up.

You only have one life so you must be careful not to get too close to the creatures, especially when you are not in the globe the rate at which you lose energy increases. Fortunately you can recharge by standing on a power point.

At any stage of the game you can inspect the status screen by pressing the space bar. This screen shows how much of the parchment you have collected, your energy level and how many objects (keys etc) and creatures you have gathered. A record of the time and score is also displayed.

CRITICISM

● **'As the ratings may well show, getting started on this game was far from easy. The instructions showed the anaesthetic to be a sponge like blob, but in fact for the first area it looked more like a bowl of flowers, and there was a bowl of flowers on another screen. A joke perhaps. The game itself has some very well drawn and colourful graphics. The movement of the character and the globe take a lot of getting used to, but that's all part of the game. On the whole I found this to be a reasonably difficult game but this was mostly due to the 'bad' handling of the craft. I have a feeling that this is a game to keep all of you mappers hard at work. Overall pretty addictive but don't expect to finish it too soon.'**

● *'I have to admit that I found this a very difficult game to complete and I'm not sure that the reasons for this are good ones. The characters are very difficult to control and the initial supply of energy wouldn't be enough to get a C5 down the hallway. I suppose that is really the challenge of it, one is expected to learn how to control the characters and have the foresight to find a recharge point in time. Nevertheless the graphics are very good and I am sure that the game is interesting enough to make the hard work required worthwhile.'*

● 'This is not an easy game to play. The movement of the globe is almost unpredictable, as it is meant to be, but it's still pretty confusing. When the character leaves the globe he is pretty happy just pottering around the floor of the cavern, but cannot be controlled when floating upwards. I have decided that there really isn't enough energy for the first part of the game — I know there are power points available but I'm sure I would have made more progress if a difficulty level had been provided. On the whole this is a very attractive game; there is a great deal to see and it should keep the patient and persistent going for a long time to come.'

COMMENTS

Control keys: definable
Joystick: any
Keyboard play: good
Use of colour: very good
Graphics: great
Sound: a little distressing at times
Skill levels: one
Lives: one but can be re—charge energy
Screens: 256
General rating: an inspired but difficult game

Use of computer:	73%
Graphics	84%
Playability	75%
Getting started	68%
Addictive qualities	83%
Value for money	82%
Overall	83%



GET THE PICTURE GET THE PICTURE

ROCKFORD'S RIOT & BOULDER DASH ON ONE TAPE!



BOULDERS, JEWELS, FIREFLIES, PUNISHING PUZZLES

Mail Order: MONOLITH,
3rd Floor, Lector Court, 151 Farringdon Road,
London EC1R 3AD.

Price £9.95 inc. P&P.
Cheques/POs payable to Monolith.
Credit cards call 01-837 2899.

CBM 64

CRASH BACK NUMBERS

ZX SPECTRUM

fill that CRASH Gap.....

1 February 84	● Out of stock
2 March 84	● 'Kong' games ● Currah Microspeech ● Living Guide ● Steve Turner
3 April 84	● 'Missile Command' games ● Living Guide ● Sinclair Talks ● Code Name Mat
4 May 84	● The Quill utility ● Graphics utilities ● Microdrive ● 'Pengo' games ● Living Guide
5 June 84	● New Generation ● Jet Set Willy Map ● 'Panic' games ● Alphacom printer
6 July 84	● 3D in games ● Atic Atac Map 1 ● Specgraf ● 'Pacman' games
7 August 84	●Out of stock
8 September 84	● Tir Na Nog ● Downsway & Comcon i'face ● White Lightning graphics utility ● Martin Wheeler ● Antic Map ● Design Design ● Lothlorien
9 October 84	● Games Workshop ● Dk'Tronics
10 November 84	● Battlefield Joystick — comparisons ● Deus Ex Machina
11 December 84	● Music Typewriter ● Sureshot j'stick ● Hisoft Ultrakit ● Lords of Midnight Map ● Wanted: Monty Mole Map ● Pyjamarama Map
12 Christmas Special	●Out of stock
13 February 85	●Out of stock
14 March 85	● Airwolf Map ● Tir Na Nog Map ● Omnicalc 2 ● Mike Singleton ● Doomdark's Revenge map ● Artist: Steinar Lund
15 April 85	● London Underground Map (!) ● Designer's Pencil ● Backpackers Map ● Technician ted Map ● Sinclair Story 1 ● Chris Sievey ● Scott Adams ● Mizar ● Artist: David Rowe
16 May 85	● Sports simulations roundup ● Sinclair Story 2 ● Firebird ● Incentive ● Light Magic graphics utility ● music utilities ● Underwurlde Map 1 ● Bruce lee map ● Sabre Wulf Map ● Everyone's A Wally Map ● Artist: Godfrey Dowson
17 June 85	● Denton Designs ● Frankie ● Spectrum surgery ● Sinclair Story 3 ● Knight Lore Map 1 ● Underwurlde Map 2 ● Tape to Microdrive ● Leonardo graphics utility ● Datel sound sampler ● Artist: David Thorpe



With the exception of issue 1, we carry a limited stock of back numbers for readers who may have missed out on earlier issues and for those with gaps in their Binders! Any issue bearing ??? after the mini-contents means that the stock is severely limited and before ordering you should phone to check.

BACK NUMBERS SPECIAL OFFER
● Any three or four issues ordered at the same time — 40p off total ● Five or more issues ordered at the same time — 20p off each item.

PRICES
- Issues 2 — 7 at 75p each
- Issues 8 — 11/13 — 15 at 85p each
- Issue 12 (Xmas) at £1.25
- Issues 16 onwards at 95p each
- Post and packaging: 20p per item ordered

Name ____________________

Address ____________________

____

Postcode ____________________

● I would like to order CRASH Back Number(s)

Please tick the correct box

	Unit	Quantity	Price
2☐ 3☐ 4☐ 5☐ 6☐ 7☐	75P		
8☐ 9☐ 10☐ 11☐ 13☐ 14☐ 15☐	85p		
12 (Xmas Special)☐	£1.25		
16☐ 17☐	95p		
Total £			
P&P total (20p per item) £			
Sub Total			
Less Special Offer discount where applicable: £			
Total enclosed: £			

Please make chgques/postal orders payable to CRASH MICRO. It is best to avoid sending cash payments. Please do not enclose any order with mail to the editorial side of the magazine as this may result in delays. Send your orders to the address below

BACK NUMBERS, CRASH MAGAZINE, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB



A rather green Alice Cooper look-alike on the front screen of GO TO HELL, Activision's anonymous attempt at the bad taste bandwaggon

GO TO HELL

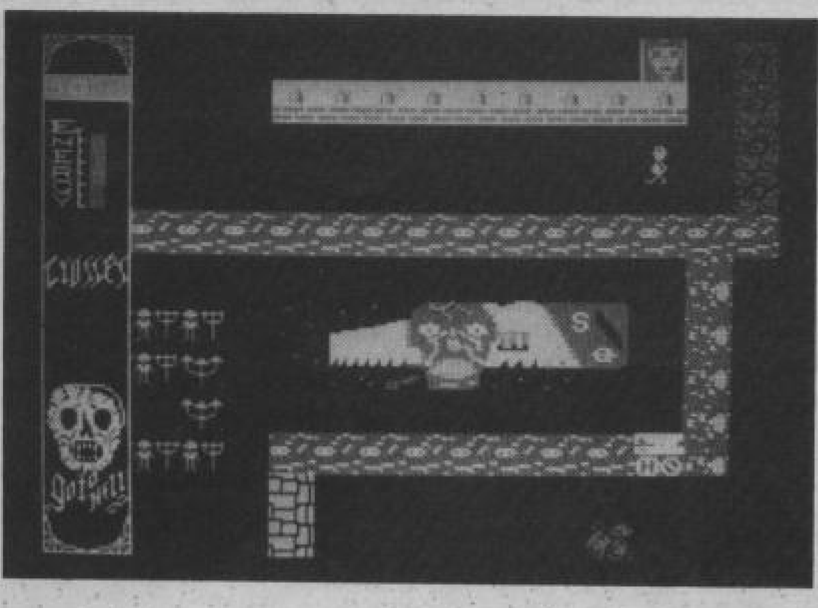
Producer: Triple Six Software
Memory required: **48K**
Retail price: **£6.99**
Language: **machine code**
Author: **J. Jones(!)**

Your fate, in this game, seems to have arisen by the unfortunate use of the phrase 'Go to Hell'. You must have cursed someone, a person near and dear to you, with the result that they actually *went* to Hell. Now you must follow, and rescue them.

The game takes the form of a complex maze. The walls are 'built' from such strange graphics that one can get lost following the same wall from screen to screen. To rescue the person you cursed you must scour the maze looking for seven crosses; only a complete collection allows you to escape. The search for the crosses is hazardous, not least because contact with the walls and all stationary objects rapidly drains the life force from you, and once drained you will have to re-start from the beginning.

Your energy will also be depleted when you are hit by one of the wide variety of gruesome objects being hurled at you by an even larger collection of gruesome creatures — anything from large hairy spiders to mad headless monks. Your only defence against these creatures is a well aimed mini-cross, and a direct hit will replenish your energy a touch. In this nightmare world you will be distracted by the horrible events taking place around you; heads being crushed, victims on the racks, heads being sawn through and masses of other equally revolting scenes.

Sawing through a skull, in the maze of Hell



CRITICISM

● 'I managed to steal a glance at the press release that came with this game and read that we would find it hard to do this game justice. That may be so but when all is said and done it is a maze game: a fairly well drawn maze game; a complex maze game and a maze game that often requires a high degree of control skill. It is still only a maze game, and one that is full of revolting, crude and downright vile images. Now I am going to give Triple Six (whoever) the benefit of the doubt and assume that my reaction was exactly as they had hoped for . . . let's see if they are right and maybe they can sell lots of games to punters who only want to buy it because it's so horrid. But — to do the game justice — if you really want a maze game that's full of lots of silly, nasty pictures then buy this one.'

● *'After looking at the subtle cover I was expecting a game that would reflect the same. Wrong. With lots of nasties and all sorts of things that one might expect to go on in Hell.* Go to Hell*'s graphics are above average except that the main man is pretty poorly animated. This is a playable game but not at all addictive.'*

● 'This is certainly a very unusual game, full of very strange graphics. Movement round the maze is very hard, not because of the other things throwing objects at you — it's the nearness of the maze walls that make for the difficulty. Frequently there is exactly enough room to fit your character through, one slip and you're as good as dead. All in all it's an annoying game to play.'

COMMENTS

Control keys: Q/A up/down, O/P left/right, M to fire
Joystick: cursor, Interface II and Kempston
Keyboard play: fine
Use of colour: varied, lots of attribute problems
Graphics: novel, fairly well drawn
Sound: lots of chewing and sniffing sounds
Skill levels: one
Lives: three
Screens: over fifty
General rating: a bit sick, otherwise above average

Use of computer	62%
Graphics	72%
Playability	65%
Getting started	69%
Addictive qualities	72%
Value for money	74%
Overall	**70%**

JET SET WILLY II

Producer: Software Projects
Memory required: **48K**
Retail price: **£6.95**
Language: **machine code**
Author: **Messrs Smith and Lawson**

There really isn't a great deal that can be said about this game that hasn't been said about its predecessor *Jet Set Willy. Jet Set Willy II* is a pretty faithful sequel.

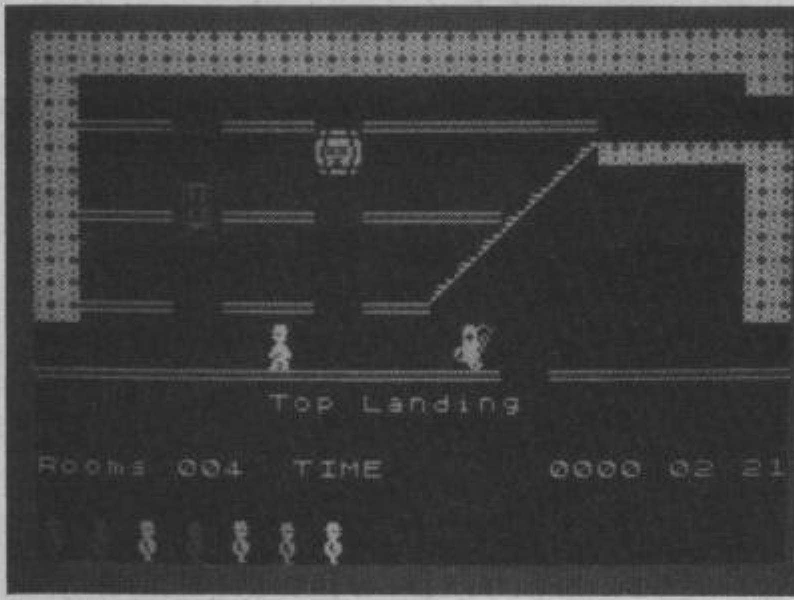
The story begins soon after poor old Willy has had a nasty fall down the stairs. He should be in bed recovering but due to the mess left by some rather strange builders his wife Maria is having a fit and insisting that Willy tidies the house. On his journey round the mansion Willy is shocked to discover that it has a lot more rooms than he is paying rates for. The Builders are responsible, but why?

As before you must guide Willy around the house avoiding the myriad hazards — razor blades and flapping loo seats to mention just two. As you pass from room to room you will notice objects be they bottles, glasses or even taps. These objects must be collected by guiding Willy over to them and touching them. This may mean having to dodge 'things' scampering up and down in your path, in which case you will have to apply a little skillful jumping. Some very nasty traps have been set for you — the conveyor belt is a cinch compared to some. Repeat the gathering process for each room of the house and hope that you make it to the end, whatever that may be.

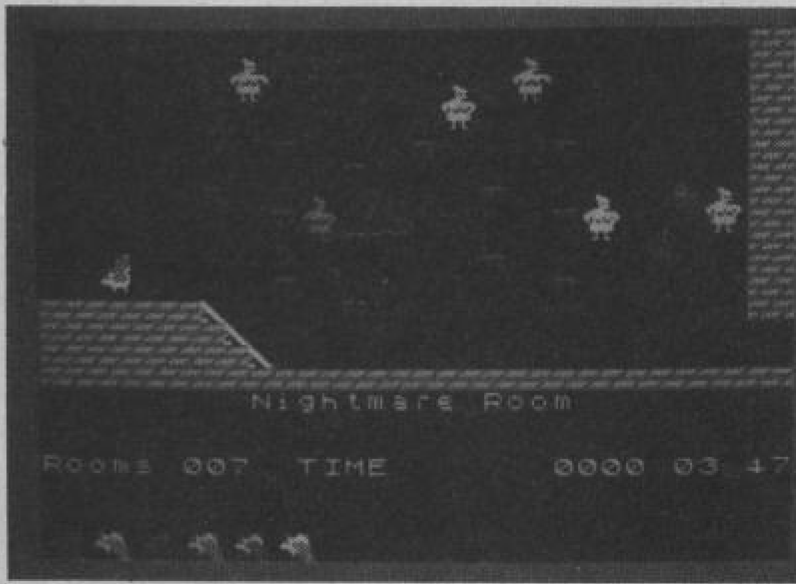
COMMENTS

● 'I think that *Jet Set Willy II* is a brilliant game, but it's a shame so many of the screens are the same as *Jet Set Willy. The graphics are identical — they still have the same degree of smoothness and clarity. I reluctantly have to conclude that I don't consider Jet Set Willy* to be a sequel . . . it's more of a De—luxe version. That said, the game is still up to a pretty high standard, better in some respects.'

● *'No doubt there are many people that have eagerly awaited the arrival of JSW2. It has been a long wait and my goodness, it wasn't worth one tiny minute! Admittedly there are thousands of people who bought JSW and no doubt there will be thousands who will buy*



Looks familiar? Jet Set Willy wanders through his new, improved mansion.



The Nightmare Room from JSW 2. Round here, the Art Room feels the same

SW2, but what you get for your £6.95 is an extra forty rooms to explore and work your way through. Great, isn't it? The graphics are now somewhat dated and long past their prime. It's a shame that Software Projects didn't put their time and effort to better use and produce a totally new idea instead of extending an already dead and well-poked game. Definitely not my idea of a fun playing game, but I suppose it's quite a good buy if you haven't already got JSW1.*'*

● 'Here we go again on the final part (hopefully) of the Willy Trilogy. At the end of eighty-three we marvelled at the superb graphics and addictiveness of *Manic Miner*; in mid eighty-four we were astounded at the sheer size and playability of one of the first arcade adventures *Jet Set Willy*, which sparked off Poke Mania (or Candyitis as some people call it). Now a year on we can again be astounded by the playability and larger size of the same game that we were astounded by last year. . . . I'm afraid to say that *JSW 2* is not a great improvement on its parent. The main differences between *JSW 2* and *JSW* are the extra screens and the speed — which is a touch faster, making the game slightly more playable. Another difference I have noticed is that it is easier to get into loops where you lose all your remaining lives. This is obviously very infuriating if you are well into the game. If you haven't seen *JSW 1* yet (where have you been?!) I would recommend this game. I wouldn't tell players of *JSW 1* not to buy this game either as it **is** interesting to play the extra screens. Generally I found this game playable, but I can see my interest deteriorating after a few weeks.

CRITICISM

Control keys: Q,E,T,U,O: left, W,R,Y,I,P: right, shift to space: jump
Joystick: Kempston and Ram Turbo
Keyboard play: very good
Use of colour: very good
Graphics: as good as ever
Sound: nice tune
Skill levels: one
Lives: seven
Screens: over 100
General rating: very good . . . but not much progress

Use of computer	70%
Graphics	50%
Playability	60%
Getting started	70%
Addictive qualities	45%
Value for money	72%
Overall	**61%**

Reviews

ROLY POLY GOES TO HOSPITAL

Producer: David Todd Software
Memory required: **48K**
Retail price: **£4.99**
Language: **machine code**
Author: **David Todd**

Roly Poly is a new character to the computer games scene and in this game he is trying his best to help our National Health Hospitals out with their equipment shortage.

The game features more than thirty rooms, each containing at least two items of urgently needed medical equipment. The little rotund character, Roly Poly, must be guided past obstacles as he explores the building. The hazards include just about anything on the screen. For instance, the first screen has a series of little pyramids on the floor which must be jumped over — but at the same time you must avoid being squashed by flying bus stops. The first object to be picked up is a scalpel but that can only be reached if you jump onto a very narrow little wall. Later on the rooms become a little more complex and other features, such as a lift, can be used to reach the different levels.

CRITICISM

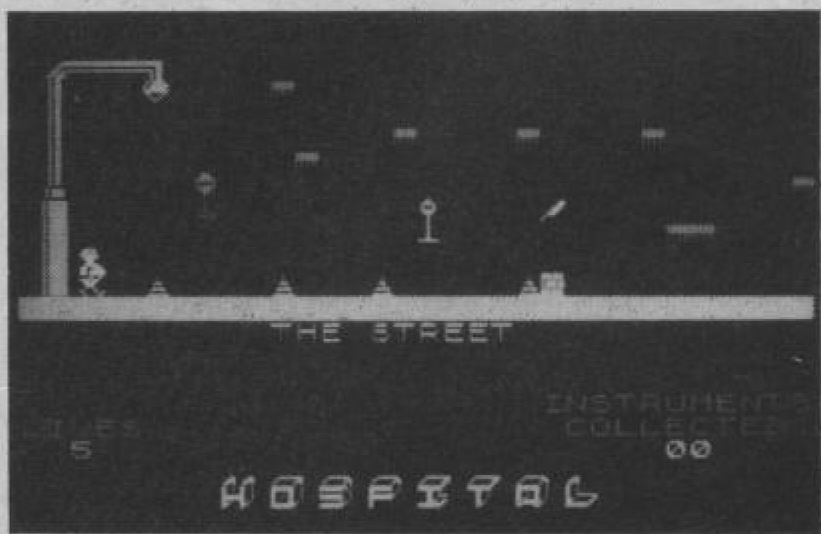
● 'My first impression of *Roly Poly in Hospital* was "gosh chaps this looks a bit like *Manic Miner in Hospital*". Yes I know there's no such game but if there was . . . I found the game pretty difficult to play because the character seems to jump such a long way, but I suppose that's part of the game. Nevertheless the game is both fun and challenging. The graphics are neat, smooth and fairly colourful. Maybe worth a look for the price.'

● *'This game resembles* Manic Miner *and* Jet Set Willy *but it is very much harder to play, even after the practice mode. I have only managed to get to the seventh screen so I'm sure that it will take ages to play though the whole game. The graphics are well animated, small and neat. The sound only has spot effects but there is a smart if disjointed tune at the start. I think on the whole that the game is a little too hard, otherwise it would have been much more addictive. Without some victories you begin to lose the sense of achievement that drives you on'*

● 'While I was impressed by the quality and the colour of the graphics I think the game could have been a little faster. I have spent a long time playing this game and I am a long way from solving it. I'm not sure that just because a game is ultra hard that should make it good. But considering the quality of the programming I think I can safely recommend it to the masochists among you.'

COMMENTS

Control keys: Q to P in pairs for left/right, A to jump
Joystick: Kempston and cursor
Keyboard play: responds well



Use of colour: flat but smart
Graphics: smooth and detailed
Sound: limited to spot effects
Skill levels: one, and a practice level
Lives: five
Screens: over 30
General rating: clever, neat but over difficult.

Use of computer	65%
Graphics	72%
Playability	57%
Getting started	60%
Addictive qualities	61%
Value for money	60%
Overall	**62%**



Johnny Jones, modern day hero and explorer extraordinaire, has finally discovered the lost Temple of Abu Simbel, built by the great Pharaoh Ramses II over 3000 years ago.
In frenzied desperation he enters this secret world and is drawn into a frightening adventure, threatened by the Pharaoh's curse, in constant danger until he can reach the inner mortuary chamber.







SPECTRUM 48K £7.95

Gremlin Graphics, Alpha House, 10 Carver Street, Sheffield S1 4FS. Tel: (0742) 753423

Gremlin Graphics



The battle between FORUM intros and Playing Tip intros hots up this month as once again CRASH sets out to prove that the magazine is nothing more than an ego-boost to underpaid superstars Mangram and Candy. A number of readers, as you will see, have decided that we are one and the same person. Not true, but I'll leave the full answer until later.

Despite the official ban on poetry in the Forum, I've been flooded with the stuff again, some of it not half bad either, so forgive the occasional excursion into culture vulture land. In fact I was so taken with the first letter (not exactly poetry) that I'm giving it LETTER OF THE MONTH status. It also fits well, because as I write the annual Shakespeare Play is taking place in Ludlow Castle . . . I'm a bit suspicious of the writer however. . . .

FROM THE FIRST FOLIO

Listen to this Lloyd,
I've just unearthed one of Shakespeare's lesser known plays 'The Tragedy of CRASH' in my back garden. So here's an extract from my exclusive discovery donated to my worthy mag. Why am I so generous? Because the deep hidden meaning applies indirectly to you.

THE SET SHOWS A STREET SCENE IN ANCIENT LUDLOW. (Enter Mike Roberts, CRASH Rederus and Spectrum Owneriet)

MIKE: O greatest friends, you joineth I,
Whence my heart's flooded with hateful misery,
for having ventured forth and given hard earned pounds
to thy shopkeeper in return for Everyone's a Wally
having been enhanced by its delights,
in awe of its wondrous graphics and addicted to such joyous, such glorious puzzles.
Alas, my merriment hath culminated all the fun
and displayed the answers broad and clear
so complete a solution it doth even make,
Wilma's bra seem empty

REDERUS: Fair friend, your grief over so pitiful a tragedy
Is shared with I
for unto the public that same magazine,
Hath presented the methods of defeating Tir Na Nog

OWNERIET: Though it grieves me to say what follows now
More enjoyment, more sterling has fallen in vain
Answers to Avalon, Pyjamarama and Midnight too, alas,
(And endless others) and pokes galore,
Alas a second time

MIKE: Wilt the dreadful, sinful Robin Candy persist,
If we were to send letters of protest unto he?
Wilt thou not follow me to my grave,
In order to prevent him from wasting our cash again?

OWNERIET: Then unto he this letter we shall send,
And begin the 'Anti Robin Candy giving games away fund',
But hope the only giving games away from CRASH,
is prizes for our star letter

REDERUS: But that is not possible,
For Mangram doth only give his games,
If thou doth mention Design Design

MIKE: Oh yeah! Better go'n buy DARK STAR and play with the high score chart

Actually, Lloyd, Shakespeare didn't write it at all! I did! Had you fooled though, didn't it. Oh well, I'll leave you to type this letter into FORUM in peace.
Mike Roberts, Okehampton, Devon

Are you sure you aren't the same Mike Roberts (from Ealing) who so annoyed everyone with his comments on the Spectrum v the 64? No, well okay then. I thought this was a pretty original way of getting the software, but of course the real reason for awarding it was because you did mention Design Design . . .
LM

BUG BOX SPECIAL!

This month's BUG BOX includes three excellent comic strips. I thought all three were genuinely funny and clever in the true sense of a short, sharp story well told. The entries from ANDREW SANDERS and RICHARD HARRISON almost deserve a regular spot in fact, and as they both sent in two different little strips, I'll use them over two issues. AND they both get a prize

TAKING A BASH

Dear CRASH
Again I am going to take a bash
At getting my poem printed in CRASH.
This time I write, not directly for software
But 'cos I lost CRASH and didn't take care
A new Spectrum owner I knew at school
So at my feet he began to drivel
'Which is the best magazine to buy?
'CRASH' I said, 'And don't ask why'
So I lent him March Edition to have a look at
He lost it and that was the end of that.
One more subscriber I got for your magazine
But my issue 14 is now a 'has been'
If this poem is the star letter
Can I have another to make my set, Eh?
That is now the end of my sad story
And now something of great glory
I have completed PYJAMARAMA at last
I used the late poke and tips of past
More playing tips and maps are a good idea
Extended letters pages also brings no tear
BRUCE LEE I completed on my 4th game
And that was before your map came
A reviewer said it was easy to do
And beating up nasties is good for you!
That is why I keep playing BRUCE LEE
Because beating up nasties is also for me
Although I didn't get star letter I was glad
Because ALIEN 8 I already had
This time if star letter is what I get
Can I have ALIEN and the gap in my set
Martin Clark, Leeds

PS ALIEN by Argus Press please, 'cos ALIEN 8 I complete with ease.

Good try, Martin, but as I said, POETRY IS BANNED (by Order — signed RC)

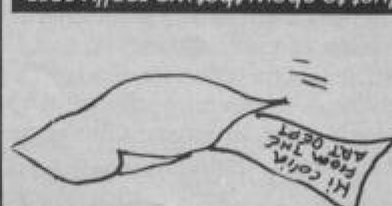
DOWN UNDAH

Dear CRASH,
G'day! Living 'ere down undah ain't all it's cracked up to be. We get all great mags about 3 months late, and without wishin' to be a wet blanket I reckon it's pretty darn rotten. I guess I'll just haf' ta fork out fifty bucks (not that I'm complainin' about the price mind you) and subscribe.

Now I reckon I stop grumblin' an' get on with me lettah. I wrote t' say that CRASH is Beuty-Bonza! I read all the reviews before I empty me wallet so I don't haf'ta kiss me hard-earned cash g'bye for a grotty little game with tacky graphics that ain't worth the price of a mouldy peanut, an' aftah I read the review of US Gold's *Zaxxon* I was really disappointed on how they could wreck up a good game with bad programmin' (wot d' the septics know about computers anyhow?)

And as I wait with baited breath for the next issue t' show up, I say again that CRASH is a b****y good mag, good on ya!
Colin Lockhart, Forbes, New South Wales, Australia

Just to show that we really care about our Colonial cousin readers, I've got the art dept to print this upside down, Colin, so's you can read it easier. I'm sorry it takes so long for CRASH to get out down under. I suppose if it was distributed by airmail instead of shipped out, the mag would cost a small fortune. **LM**





An unusual Bug Box item from ALAN CHOO-KANG, of Kirkcaldy, Fife, inasmuch as it's a loading screen.



Here are a few lively bugs from ANDREW MURRAY, West Wickham, Kent.

A CRASH SOAP

Dear CRASH,
Yes — it's DYSNTRY all over again. What will happen to the CRASH Team next? Young? Robin Candy (the dashing young man with the charm of a squashed toad) DEMANDS! a clear photo of himself — Roger (he, who for some reason has brackets in between his name) Kean says NO! — Candy gets depressed and so gets drunk on wine gums.

MEANWHILE, back at the ranch, Lloyd gets rushed to hospital after someone took a photo of him, and Lloyd has collapsed through a severe case of photophobia (nice long word, look it up in your dictionary when you get better Lloyd).

Here an emotional scene takes place (violin music in background please), the whole of the CRASH Team gathers round, Oli (that's one hell of a weird name), Roger (brackets) Kean, Derek (sorting out Morkin and Doomdark) Brewster, and Matthew Uffindell (that can't be a real name can it)?

Roger (big hunky man) Kean asks who it was who took the photo of Lloyd. They all close in with an air of suspense as Lloyd props himself forward and whispers the final words of a great man!?:
'Well' (Yes he'd caught a drastic case of Wellitis from Robin (blurred) Candy).

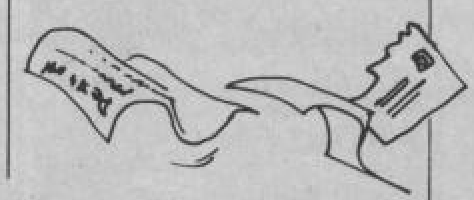
'******' says Oli (six asterisks, that'll get you thinking).

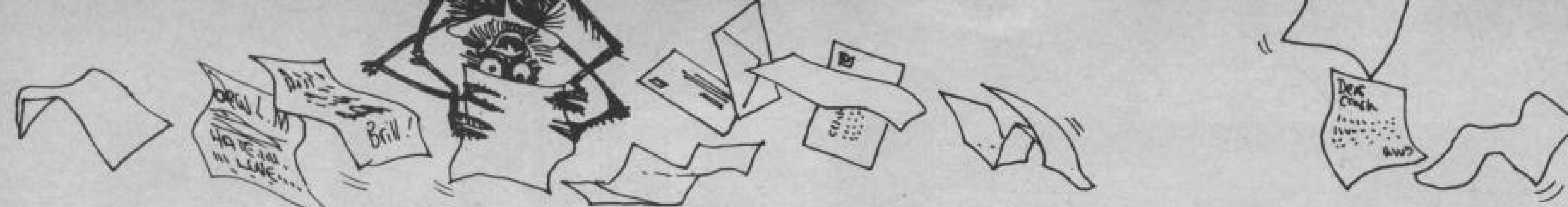
'WELL', says Roger Kean — no brackets!!! 'it is catching'.........

BUT WHAT WILL HAPPEN NEXT?
Will Lloyd rise from the dead?
Who cares?
Did he really exist anyway?
Who will get Lloyd's desk and money?
Who is the Ultimate team?
Who will win the World Cup?
Will I get the star letter?

None of these answers, but others, will be answered in next munf's episode. Only in CRASHTY
Craig Stewart, Plymouth

WELL, one's answered anyway — no letter of the munf' for you.
LM





NAUGHTY CANDY

Dear Lloyd,
Please tie Robin Candy up and stop him from revealing tips for new games, some of which are not yet a few weeks old in the shops. I bought *Shadowfire*, and spotting the review by Robin, I read it and tried his methods.

Lo and behold, little over an hour later, game completed! What a waste of money. I've two choices: either stop buying CRASH; or hire 'The Jackal' to rub out Candy — and I can't afford the second option.
P Morgan, Dyfed, Wales
PS I suspect the only reason Robin gave us all the gen on *Shadowfire* what that it's the first game he's ever completed.

Under great pressure RC has requested a personal reply, so over to you Robin . . . What — oh you've already replied in the Playing Tips? Fine, thanks for wasting my time. Sorry, P Morgan, you'll just have to turn to those dreaded PTs.
LM

OVERLAY PROBLEM

Dear Sir/Madame,
About three months ago I changed my ZX81 for a Spectrum Plus, which was all made possible by a windfall of cash. I enjoyed adventuring on my ZX81, so you can imagine how much I was looking forward to the infinite choice of adventures my Speccy would bring. About one month after getting my new computer, I bought *Lords of Midnight*.

The game was brill, well thought out and with impeccable graphics, but there was one major drawback — the Keyboard Overlay provided with the game would only fit my Spectrum Plus if I cut it up into pieces.

Presumably, the Software manufacturers think that if you own a Spectrum Plus, you must be good at making your own keyboard overlays — have the software companies realised that there are two different Spectrums? Or is there anyone who makes blank Keyboard Overlays which I could use on my Speccy Plussy?
T Broadhurst, Wythenshawe, Manchester

The Sir is fine — a little less of the Madame if you please!
Of course the Lords of Midnight *packaging was all done long before the Spectrum Plus appeared on the market. Overlays work quite well on the rubber keyed Spectrum, but the Plus keyboard isn't really suited to them. I don't know the answer to this one — does anyone?*
LM



MARK SIBSON from Ossett, West Yorks caught Robin Candy rather well, I thought. The cartoon of Angus Ryall, however, had to be censored, sorry . . .

HYPER PIRATES

Dear Lloyd,
I think I have come up with a new theory on piracy. It's a fact that not all the games out now are really brilliant, most are pretty average. Your ordinary pirate will copy every game he comes across, copying them all, good and bad alike.

Most of the games he copies, he will play only once or twice, because they are not that brilliant. He would play only a few games regularly — for example I have had a copy of *Psytron* for five months which I have only played once, and out of my entire illegal collection there are only five games I would have bought if I hadn't been able to get a copy of them.

If you think about it, money is only lost on a game if the person who copies it would have bought it in the first place. This means that far less profit is lost due to copying than most software houses would have us believe.

Also, the software houses may like to know that the harder they make a game to copy, the more determined the pirate is to copy it. So stop using Hyper Loads — it would save everyone a lot of trouble (including the honest people who buy a game just to find out they can't get it to load).

Thanks for reading this letter, and I hope it will change the way people think about piracy.
'Long John Silver'

I think you are right about hyper loads — more a nuisance than a protection, but it still doesn't answer the central problem that the more people copy games illegally, the less money there is for the software house and the harder it is therefore for them to continue making games.
LM

LETTER FROM AN IDIOT

Dear Bloyd Diagram,
I'm a very rich Spectrum owner who buys lots of incredibly expensive games every day, and I now have 2,567 tapes in my collection. I also wipe my nose with budget game inlay cards, and keep warm in the winter by burning Cray supercomputers in our back garden which just happens to be a small area called 'Mexico'.

I really like Ultimate games, but they're so cheap I buy lots and lots and give them away to charities like 'Buy Ryall some new clothes fund'.

I think your magazine, or should I say comic, BASH is really fine. Just one or two constructive comments to help you keep your pamphlet up to the standard of my other daily, 'Mormons Weekly' however . . .

How about an article on the molecular structure on the pygmy artichoke's roots? I'm sure you'd increase your circulation by some. And, as I think somebody else once suggested, an article or series about how to program in Pascal (or even Fortran) on the ZX80 would go down well.

I would just like to tell you what I think of Dobbin Randy, but you wouldn't print it anyway . . . anyway, I'll have to go now because my Uncle Ronnie's here (he's the President of America you know), and he's brought his boat with him — the QE2, you know — and we're going on holiday . . . hang on . . . there's two men in white coats here . . . get off! . . . I'm not wearing that thing! . . . I'll just sign off. . . .
Stephen Nolan, Walton, Liverpool

I admire the strength of your nose to cope with those stiff inlay cards. A CRASH cooking column (featuring pygmy artichokes) is very much on the cards, I'm told. Graeme Kidd, an expert on budget price cuisine and author of 5,000 Things To Do With A Tea Bag (a companion book to my famous Long Word Dictionary) is planning something along these lines. Enjoy your holiday — I hope the stay won't be too long . . .
LM

SEX MADMAN?

Dear Lloyd,
A question to all those CRASH adventurers out there — How many of you would buy an adventure based on that brilliant female Madonna? After all, Ocean are bringing out their *Frankie* game, and I'd like to do a bit of market research before I bring out my Quilled adventure entitled *Like a Virgin — the Adventure*. (It'll be good, I guarantee it, since I love Madonna!

Finally, why haven't we seen a picture of you in the magazine, Mr Lloyd Mangram? Perhaps if you did appear in CRASH, hordes of nubile young speccy owning females would storm the Ludlow offices in a frenzy to meet you. Or maybe you are indeed an alien from an unknown region of the universe like Milton Keynes?
R Hogg, Penllergaer, Swansea

I've never been near Milton Keynes in my life, though I hear it's very nice (have to put that in because there are quite a few readers living there, and we wouldn't want to upset anyone, would we)? As I've said before, I hate being photographed. Anyway, it's become a 'thing' now, and I wouldn't want to spoil anyone's personal vision of me and thus lose the mystery element that makes me a super star (look what happened to Robin Candy).
LM

A SOUND RATING

Dear CRASH,
Now that you have, at last, altered your rating system so that the 'Overall Rating' is no longer an average of the others, could you give some sort of percentage rating for sound so that we can see how good the sound is. Describing it in words is usually pretty vague.
S J Hawrylak, Tunbridge Wells, Kent

The trouble with Spectrum sound is that it depends so much on your individual computer and its type. The Plus sounds a lot louder, for instance than the rubber keyed version. And then, we tend to hear whatever sound there is with various add on amplifiers and things. When you hear it without (if you haven't got anything) you will probably be disappointed. However, your



request has been passed on to Those Who Decide Things, and we'll see what happens.
LM

GOOD VALUE

Dear Lloyd,
I have read with interest some of the letters in Forum, which contain complaints about the price of software. Well, I'm sick and tired of people moaning that this game or that game is too expensive.

I agree, ten pounds is a bit steep for a game, but it is well worth it if the game is fab. If you spare a thought for the programmers, then you realise just how much work they have to put in. On some of the top games, programmers spend up to a year getting the game to perfection, and if the game turns out to be a flop, then that's an awful lot of time and effort wasted.

The best thing to do when you buy a ten pound game is to have a look at the review of it in CRASH, and maybe also ask the shopkeeper if it is good. Maybe if you're lucky the shop will let you try it out on one of their computers. Then, if you like the game, you can buy it, secure in the knowledge that it is worth every penny.
Scott Ashley, Grantham, Lincs

Value is always a relative thing. If you compare games to either pop singles or even paperback books, I think they compare pretty well, given that they are sold in much smaller quantities. I mean, I can read the average paperback (between £1.95 and £2.95) in a day and a half, and will probably never read it again, whereas a really good game might keep me going for ages.
LM

U & NON-U

Dear Lloyd,
After reading last month's CRASH, I thought I would send you a list of IN's and OUT's, which seems to be the fashionable thing to do at the moment. Here they are:

IN
Fastloaders
War-games
'Officially licenced games'
Denton Designs
Huge plastic or card cassette cases
Sequels to games
The Games Workshop
Angus Ryall
The good old shoot-em-up
Monty Mole
Adventure International

OUT
So-called 'Mega' games
Helicopter games
Matthew Smith
Quilled Adventures
Placing ads in mags for games 12 months before they arrive
Elite
JSW pokes
Budget software
Platform games
Olympic type games
Ziggy
James Lea, Rugby, Warwickshire

Hmmm, an exercise of dubious value, but fun all the same! I suppose after the 'Bop as you Zap' spate of letters, an In/Out series is in order. And talking of BAYZ, here's a letter that starts off . . .


Mr Mang RAm,
WE Have roger KEan :-
give US a 3year sub,
'em, joanna LumleY
And a pint, or HE will
Be ReleaSEd

Get the idea, amigo? Anyway, a couple of points:- Firstly, why do all these wimps complain about all the gorgeous, gory pictures? Personally, I adore them, especially the ones featuring well-built cave girls.

I noticed you said in issue 18 that Jeremy Kimmons started the Bop . . . etc off. Well, credit where credit is due, I always say, and I notice that, as Mr Kimmons says in issue 15, John Tapper was the first to realise that the sound of the Spectrum was seriously in need of accompaniment. Why 'Bop as you Zap'? Why not 'Jive to Survive', 'Dance as you Prance' or 'Jump as you Thump' . . . ?

Adieu for now, remember the ransom and hurry up — he's getting on our nerves. Yours,
The Fiat Strada Bandidos (address witheld for obvious reasons)

Sorry lads, you're out of luck. As far as we're concerned you can hold onto him.
LM

IT'S A FAIR BOP

Dear Lloyd,
After scanning through the pages of the Earth-journal CRASH, I noticed various letters from Earth-beings telling you what music to listen to whilst playing various Earth computer games.

However, it is evident that your Earth-programmers also enjoy listening to music. For instance, did you know that *Avalon* and *Pyjamarama* are both songs by earth-group Roxy Music? Is Steve Turner really Bryan Ferry (seems unlikely)?

There are more examples of song titles being stolen for game names. *Wild West Hero* by ELO, *Locomotion* by OMD & someone else I can't remember, *Ghostbusters* by Ray Parker (does this count?), *A View to a Kill* by Duran Duran (does this one count either?), *The Forest* by the Cure, *Here Comes the Sun* by someone else I can't remember, *Confusion* by New Order (Incentive can't spell), *Complex* by Gary Newman (neither can Legend), etc, etc. . . .

A few bands have had their names nicked as well: *Icicle Works* (by Statesoft) and *Tubeway Army* (by Crystal). Even guitarists aren't safe. The Edge of U2 has had his name pinched by what used to be Softek!

Another interesting connection between the computer game and music 'scene' (I believe this is the correct earth expression) is that they are both obsessed with charts. will we see the software industry afflicted with the same problems as the music scene, ie awful bands like W**m and Sp*n**u B*ll*t selling loads of records just because they spend £mega-billions on videos and marketing?
Nemesis The Warlock, Planet Murduk, Nether Worlds

What's in a name, I always say? (Mercy me, that's another thing I always say).
LM

BOYS, BOYS, BOYS

Dear Lloyd,
I'm writing to complain about how there's no good computer magazines for girls. I think it's dreadful.

I like the ZX Spectrum because there are lots of games for it, but they all seem to be for boys, not girls. My brother gets CRASH and I read it, but it's boys, boys, boys all the time.
Elizabeth Chatfield, Gosport, Hampshire

Ain't that the truth!? I think it's dreadful there's no women's magazines for boys as well. My sister (did you know I have a sister?) gets KNITTING MONTHLY and I read it because it's full of good patterns, but it's girls, girls, girls all the time.

However, you would have to define what makes a game for girls as against a game for boys. Why not write back and let me know what you think makes a game for girls.
LM

HELP!!

Dear Lloyd,
Just thought I'd drop you a line to tell you that I'll never be able to write a letter to CRASH.

Want to know why?

1) I can't write massive letters like June 85's Letter of the Month, because
a) I haven't got any CRYSTAL/DD games
b) I can't afford games like *Knight Lore* or *Alien 8*, so I can't compare them
c) I can't write about HYPER/TURBO loads, because they weren't even thought of the last time I bought a decent game

2) I can't write to Mandy Candy, because the only playing tip I know is Infinite Lives on *JSW* (not very original, eh?)

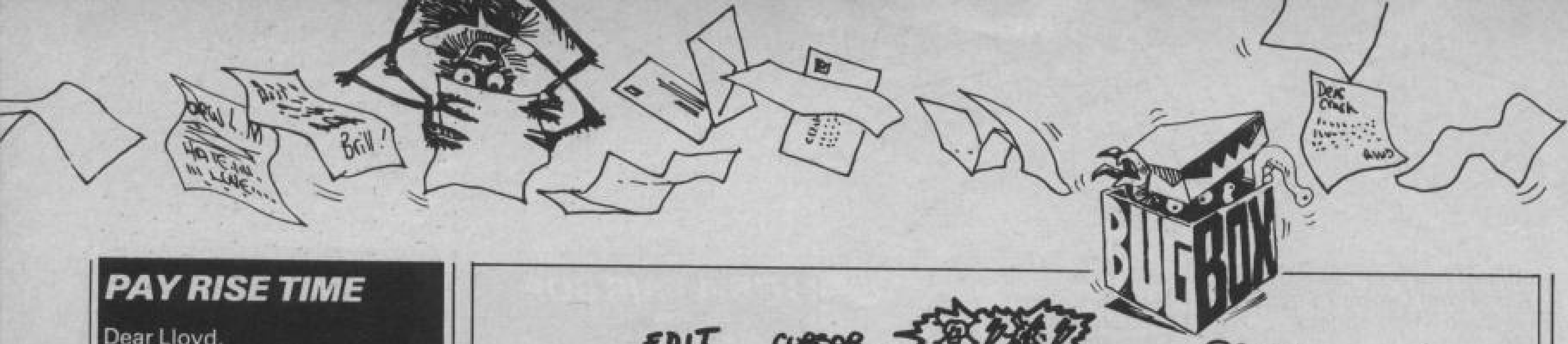
3) My pen is running out.

So there.
Antoni Perryman, London W2

Sometimes it's such a shock when you come up against this level of deprivation. I'm sure Mr Candy would be just dee-lighted to receive your JSW pokes, Antoni, after all, he hasn't had any of those for such a long time . . .
LM



A few bugs from J BROAD, Oxford — strange how so many bugs beg for £12 . . .



PAY RISE TIME

Dear Lloyd,
I think it is about time you got a pay rise. I mean all the hard letter writing and criticism from Robin Candy and readers can turn a man into a pea-brained lunatic, so Roger Kean start thinking and give 'old' LM a pay rise (or at least a bonus).
Robert Tonks, Hollywood, Nr Birmingham

I almost made this one letter of the month! Of course, Roger Kean is no longer my boss as he has gone on to pastures new (for his poor record they have demoted him to ZZAP! 64 magazine). New Editor Graeme Kidd is, if anything, a harder task master (boos off stage) and he hasn't forgotten my criticism of the phrase CRASH-SMASHED. Rucks of problems ahead for poor Lloyd, I can see, tut, tut, tut.
LM



ANDREW SANDERS from Cambridge sent in two cartoon strips called THE INKEYS. Here's the first, I'll print the second one next month because it's so good.

BRAIN CELL IN DANGER

Dear Lloyd,
In response to Martin (Wally) Chan's letter about arcade adventures, if the little twit had half a brain cell he would know that arcade adventures tax your brian (*sic*). He probably doesn't like them because he can't do them.

How can you compare the mindless zapping of aliens with a good hard arcade adventure like *Dun Darach*? If he attempted to do an adventure he would probably wear his brain cell out! Please, Martin, could you try an arcade adventure and see how good they really are....
Andy Hollingsbee, Dursley, Gloucs

Most people I have come across who have had a go at adventures, even if unwillingly, have found them quite addictive within a few hours play. It's just a question of getting that cell moving.
LM

NOT A POEM, MORE A SONG

If there's something weird in your machine code,
Who you gonna call?
CODEBUSTERS!
If you have a game, and it just won't load
Who you gonna call?
CODEBUSTERS!
I ain't afraid of no code

If you're seeing things running 'cross your screen
Who can you call?
CODEBUSTERS!
If it's headerless and it turns you green
Who you gonna call?
CODEBUSTERS!
If you're all alone, hook up the 'phone
and call CODEBUSTERS!

I ain't afraid of no code
I hear the game won't load

I ain't afraid of no code
Yeah! Yeah! Yeah! Yeah!

If you have a dose of turboload, baby
You'd better call
CODEBUSTERS!

Hacking makes me feel good!
I ain't afraid of no code

If you've messed up the bytes
And the screens won't load up right
You'd better call
CODEBUSTERS!

Who you gonna call....

Anon, Somewhere in the Universe....

With sincere apologies to anyone who may be offended! (I thought I had banned poetry, and calling it a song is no way to get round me).
LM

MAKING LIFE IMPOSSIBLE

Dear CRASH,
You received a letter the other month that caught my eye. It was by M Aldridge. May I just say that although piracy is very bad for the software industry, it will never be stopped.

It is the same as any other form of copying really — can you imagine what would happen if everyone in the world stopped taping records off the radio, photo-copying articles out of magazines and books, taping films from the local video hire shop etc.? It just would be impossible.

You may be asking where does the letter M Aldridge wrote come into it? He says you should stop printing details of the control keys for games. I don't think this would be a very good idea, as some people like to know what kind of key layout the computer has, and some games do not include the keys with them.

On another front, how about bringing Terminal Man back? I know you got a few letters from some KGB trainees saying you should stop it, but it is obvious that this minority of killjoys just want their own way, so go on — bring back some entertainment to your wonderful magazine.
Kevin Bore, Ealing, London

We'd love Terminal Man back, but the problem lately has been Oliver Frey's time. The four pages of comic strip took up so much time, and (although this isn't widely voiced abroad) he is also Managing Director of the company, so he's quite busy with other things apart from artwork.
LM

TELL ME I'M WONDERFUL

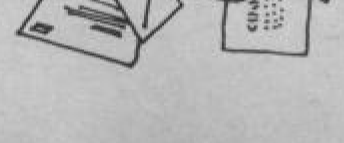
Dear Lloyd,
For the first time ever I have actually completed a Spectrum program. I was so pleased, I called Melbourne House to tell them how much I enjoyed *Starion* and discovered that I was the first to complete it. Did they offer me a Porsche? Not on your time-warp mate! A mini? A packet of Polos? . . . not even so much as a 'Congratulations'.

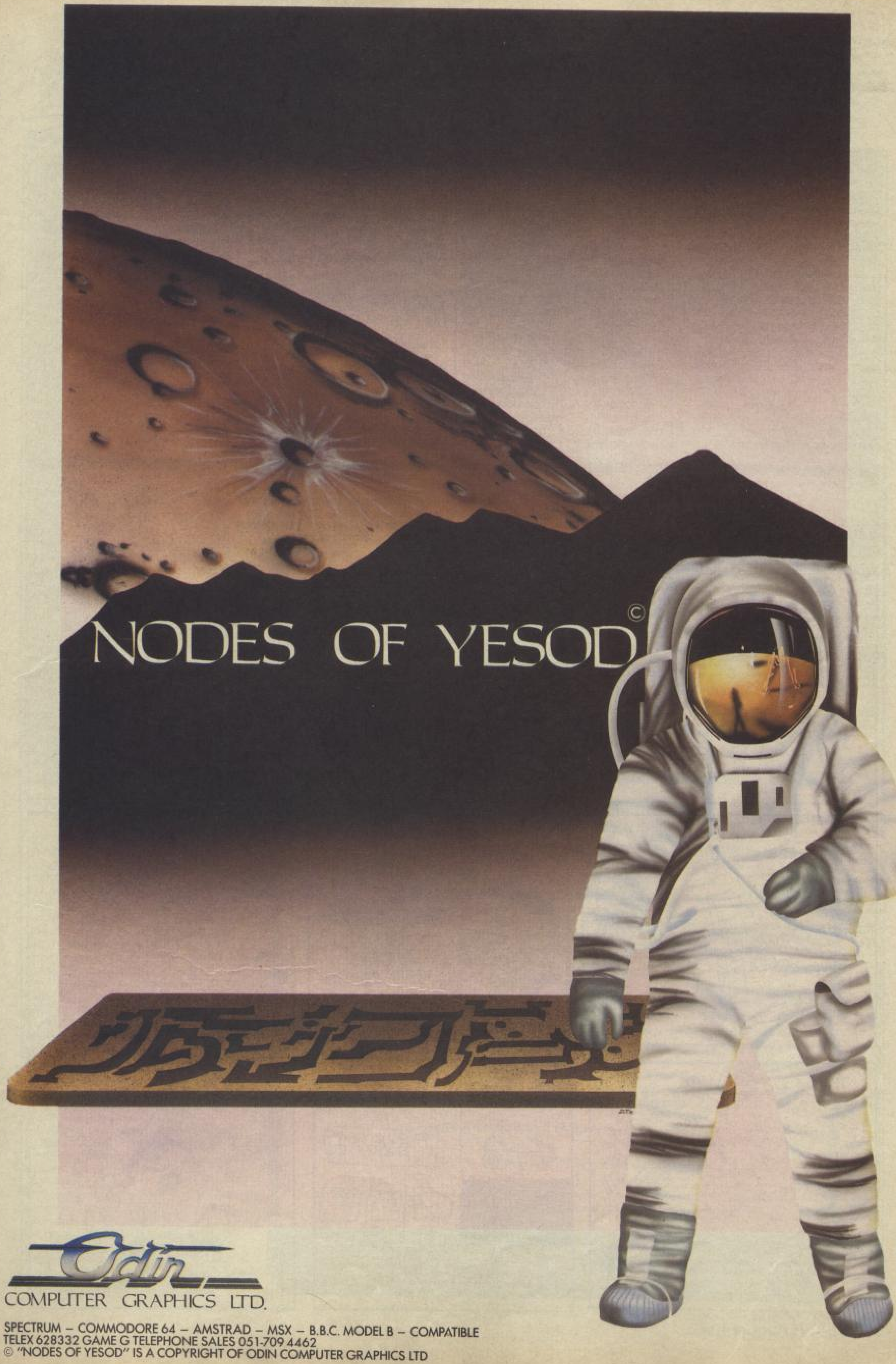
Won't anyone boost my ego and tell me how wonderful I am?
Barry Blitz, London SW9

Barry, you are wonderful.
LM

PEN PALS NEEDED

I am fifteen years old, and have a 48K Spectrum. I am also interested in machine code and would like to hear from boys and girls of any age — replies ensured!
Adrian Kok, 07-123, BLK314, Mougang Ave 5, SINGAPORE 1953




NODES OF YESOD©
Odin
COMPUTER GRAPHICS LTD.
SPECTRUM – COMMODORE 64 – AMSTRAD – MSX – B.B.C. MODEL B – COMPATIBLE
TELEX 628332 GAME G TELEPHONE SALES 051-709 4462
© "NODES OF YESOD" IS A COPYRIGHT OF ODIN COMPUTER GRAPHICS LTD



STARION Mk II

Dear Lloyd,
I am writing to you in the hope that you will publish my letter to warn other CRASH readers to be careful before buying the game *Starion* by Melbourne House.

After reading your review of the game I went out and bought it. I loaded it up and was amazed by the excellent graphics and the cunning idea behind the whole game. But three days later I found about ten faults with it and most of these faults contradicted the instructions — or weren't even mentioned.

'Oh No!', I thought, 'Have CRASH gone crazy, giving the game 94%?' But then I remembered reading a letter in your magazine about somebody who had bought a game that was a pre-production copy, so I wrote to Melbourne House explaining what was wrong with my copy.

Two weeks later their reply came, explaining that the first issue of *Starion* was more difficult to play than intended. And the only way to get extra hulls was to get a sufficiently high score.

They also told me that a new version of the game has been produced which lets you replenish your oxygen and fuel when landing on a planet with the right cargo. They went onto say that if I returned the game they would exchange it for the new version.

So anybody thinking of buying the game — ask to see it on the screen. If it's got yellow lines on the X-Z and Z-Y scanners, it is the new version. If it hasn't, it is the Issue One version.
Adrian Mc Kenzie, Hoyland, Nr Barnsley

Thanks for the information, Adrian
LM

SLIME RETHINK?

Dear Lloyd,
Could you please do something with your Hall of Slime. It is impossible to use! For instance, the fellow who claims to have completed *Bugaboo* in 4 seconds must have had a turbo-charged Flea! He is a luna-tic. Hah-hah. Do you get my point?
Robert Lines, Gosport, Hants

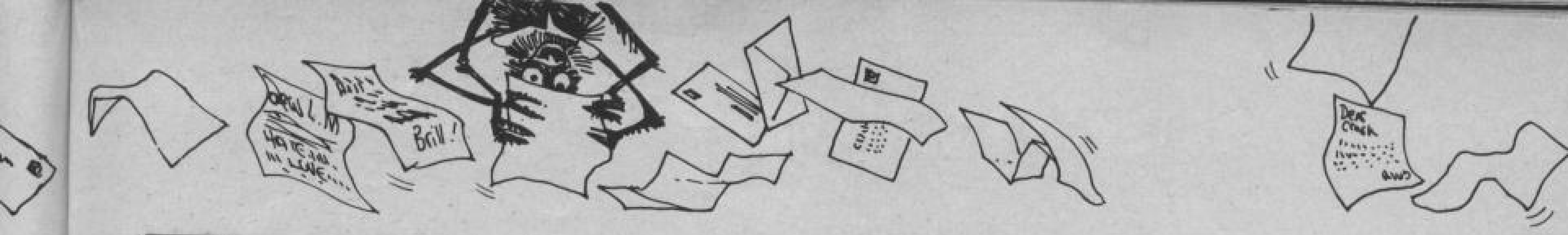
Point taken indeed, Robert. We might well change one or two things within the slimy hall, perhaps specifying certain games for scoring month by month. This gives a better chance of checking the scores out than at present, but I would hate to stop people from sending in their scores on any game. Problem with that is, obviously, there isn't really the time to scrutinise the figures, so I have to trust in you lot — hah!
LM

CRASH!

Top Bug Box prize this month goes to RICHARD HARRISON from London SE23, who sent in two 'funnies'. I'll use one this month and next issue it's THE ADVENTURES OF ROBOT LLOYD!, which had me in stitches — wait and see . . .







MAIL ORDER BURN

Dear CRASH,
I have something to say about Micromania. In issues 13 and 14 I saw the advert about *Project Future*. I thought the game looked good, so I sent for it on 18th March, direct to the manufacturers (as it was my first issue of CRASH I hadn't worked out how to use the CRASH Mail Order form).

On April 19th my Mum went to the bank to see if Micromania had cashed her cheque for £6.95 as I still had no received *Project Future*. They had cashed the cheque on 17th March. So I sent a letter complaining that they had received the money but hadn't sent my game.

I still haven't had a reply, and I would be grateful if you could advise me what to do.
Carl Alston, Chorley, Lancs

Micromania has ceased trading, and its proprietor, Dominic Wood, has informed us that he has gone into bankruptcy. I don't know at this time whether there has been any further action on the matter. But it does mean that you have probably lost your money. Micromania was not a Limited company, however, and Dominic is therefore personally liable to pay your money back, but this process is likely to take a long time and be very complicated, and you would obviously be best advised to see a lawyer — something, however, that might end up costing more than the original price of the game.
LM

COMPLAINTS

Dear Lloyd,
Unfortunately, I am writing to point out to you three of my own criticisms:
1) Cassette packaging. About a year ago, nearly all software came in standard cassette boxes, which could be stored neatly in far from expensive audio cassette racks. But now, most software that's worth having comes in boxes of differing sizes and these packaged easily get tatty and broken. One obvious example is the box for *Everyone's A Wally*, which could be very frail.
2) Loading screens. Although some loading screens are very attractive and interesting, surely they are a waste of time. All they do is make the loading time longer. I for one would like to see a quicker loading program than a longer one with a loading screen. Recently I was trying to load *Wriggler*, and the loading screen went wrong. But instead of trying to load it again I let the program continue and it worked. Usually I would have tried to load it again and wasted my time — so, are loading screens really worth the bother?
3) *Softaid*. It is a very good idea, and for an excellent cause, but some of the programs are very hard to load. One of my friends has to use three different tape recorders to load all of the programs. Another of my friends cannot load three of the games on the tape. Normally he has 100 per cent success with his tape recorder.

I know several people who were going to buy the program, but didn't because of the loading problems. Surely the quality of the recordings could be improved which would result in more people buying the cassette, thus raising more money for the fund?
Richard Taylor, Winchcombe, Gloucs

I agree with you about packaging, but software houses are up against what is called 'consumer appreciation', which put simply means 'grabbing the eye' — hence the bigger boxes (for which you have to pay a little more of course). The trouble is that there are plenty of surveys in existence on this subject which tend to prove that bigger and better looking packaging does sell more effectively.

In some senses loading screens are a waste of time, but they do add to the fun of a game, and if done properly, shouldn't take up much time. As far as Softaid *is concerned, if you consider the problems everyone seems to have in loading games, I suppose it isn't surprising that a compilation tape would only multiply those problems.*
LM

A DARK DESIGN

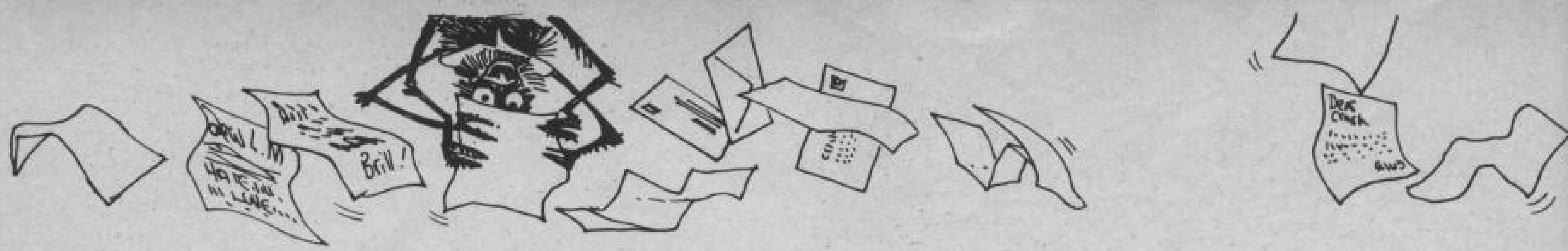
Hello Llloyd,
I am writing to you (I am you know) about that bunch of wallies down at Design Design.

Why did they change their name from Crystal? What happened to the other programmers, eg Neil Mottershead and Martin Horsely, 'cos I haven't heard of them since Crystal became Design Design. Did Big Simon boot them out (what a hideous thought)? And what happened to *Return of the Things*?

What do you get if you cross Big Simon with a Gorilla? Answer: a Thick Gorilla!

Seriously, is it just Big Simon and Graham left at Design Design, or have they recruited other wallies? How come they never advertise and still manage to sell games? Is *Dark Star* really that good? Is Big Simon really that big? As big as Kevin Toms? Why am I asking all these stupid questions?
Andrew Gordon, Clophill, Bedfordshire

As it happens, the very day I sit here putting this lot together, Gwaham Stafford has just waltzed in with the first working copy of Design Design's new game On the Run. *So, straight from the horse's mouth (so to speak): Cwystal became DD because of a clash of names with something bigger than they were (including Simon); Neil is working (would you believe it?) for Barcrest; Martin is doing some highly secret work for banks (keep your eyes peeled for the next big shock horror hacking story); someThing awful and un-named happened to* Return; *yes they have recruited more wallies, although they prefer the word 'loonies', being Johnny Lightley, Wook and Psi (no, don't even ask me); they sell games without advertising because 'they're amazing'; there don't seem to have been as many games lately because they've done a lot on the* Amstrad *and* Tir Na Nog *on the 64; there are at least two or three Spectrum games planned before Christmas after* On the Run; *yes, Simon is REALLY that big, and they don't want Kevin Toms' name mentioned in any connection with them because Simon is bigger. (I take no responsibility for this answer as my arm is being twisted behind my back as I write).*
LM



MORE FAIRS

Dear Lloyd,
I wish to see a ZX Microfair in the South West, or else me and my army will get angry and say rude words. I cannot visit the fairs in London as I am only an underpaid and overworked paperboy (I'm sure you'll sympathise, Lloyd).
I also wish to know if I can order software from a previous edition of your magazine via your mail order service.
I'm not writing a lot as I can't spell anyfink write!
Truk, Wembury, Devon

Can't help over the Microfairs, I'm afraid, as they're nothing to do with us. As to the mail order, you can order anything you like as long as it hasn't been deleted by the software house. Mail order queen, Carol Kinsey, will try and get anything going (well she has to).
LM

ADVENTURE HELP

Dear Lloyd,
Just a note to say I'd like to offer help with adventures — if anyone would like to write to me at 33 Glenburn Road, Uitenard, Northern Ireland.
Darren Millin

You don't know what you're letting yourself in for!
LM

RESTRAIN OLI

Dear Lloyd,
I am writing to complain about that naughty man, Oliver (I like drawing nude women) Frey.
I am referring to issue 17 of CRASH, page 115 where at the bottom of the page he drew a topless mermaid. I had to rip CRASH out of my younger brother's hands, risking torn pages, but luckily CRASH escaped unscathed. Which is more than can be said for my brother's wandering mind!
I also distinctly remember somebody else writing in, in an earlier issue, to complain about Oli's revealing drawings. Please restrain Oli when his mind goes wandering — it will save a lot of embarrassment.
Richard Cullen, Leeds, Yorkshire

Is that a wandering *or a* wondering *mind your brother has? Oddly, you don't seem to have objected to the naked Frankies on the cover of the same issue!*
LM

THE GAME'S UP

Dear Lloyd/Robin Mangram/Candy,
THE GAME'S UP. I've found out, Lloyd Mangram and Robin Candy are one and the same. The nasty comments between the two (make that one) are a dead giveaway. If they were different people how could they fit the comments into the middle of each other's articles?
It was just a cover. And isn't it handy how Lloyd hates having his photo taken, and the only one of Robin is blurred? Why this double identity, you ask. Well, two people means two pay cheques . . . whoever this mystery person is, he sure is greedy!
Marcos 'Sherlock' Sullivan, Bristol

Sorry, Marcos 'Lestrade of the Yard' Sullivan, you couldn't be further from the truth. For one thing Robin is a mere slip of a Ludlow school boy aged 15 (just) and that 'blurred' photograph is a piece of graphic art (supposed to be more 'groovy' than a normal pic). As for fitting comments into each other's articles — okay then, I own up, I have been fibbing a bit (shock horror), I don't really have to write on a 1922 Hermes typewriter all the while, but what's worse, I have to share an Apricot computer with the Candyman. When he comes in after school he looks at any of my files and adds things to them, so I'm forced to return the compliment when I get the chance, which isn't that often, because I'm not in the CRASH Towers that often. So there.
LM

MICRONET

Dear Lloyd,
You never print any letters from girls in your mag! Don't you get any? I wrote one and you never printed it, and it was better than most of the rubbish you print! Don't ignore this letter.
Anyway, your mag is great.
Lisa Gittins

Nope, I never print letters from girls — next complaint . . .
LM

Greetings LM,
As you may or may not know, Micronet has just launched the amazing Gallery service on page 323. This allows the users to edit their own frames (up to 26) and have them displayed in their own mini database.
Having got my grubby paws on a few pages the big question was 'what do I put up?'. The answer came to me in a flash. With the start of your Comms section in Tech Niche, there will be a host of new users who will be logging on to the Net to see what they are missing.
With this in mind, I have decided to launch a Spectrum new users section, to help with any problems that new users may encounter. At the time of writing, the pages only contain Diplomacy news but I hope to have the new pages up by the time this is printed. My area is on 323000054 and any requests for help can be sent to me on my MBX number 014453676, addressing their messages to 'Dark Star'
Daniel Marchant

If I understood the first thing you're saying, I'd answer it!
LM

Dear Lloyd,
I'm just writing, miserable killjoy that I am, to complain.
Great Mag, yes (I even have a regular order at the newsagent). But one thing mars my enjoyment of the best 95 pence-worth on the market. . . . The Hall of Slime!
Who are these posers? Why do we need a list of every game they've ever played? Why not just a simple high score chart? Why don't ships sail off the end of the world? Why isn't Eugene Evans (remember him) Prime Minister? How about a T-Shirt?
D Green

Oh look here now, I've already said I might do something about the Hall of Slime, what more can an underpaid minion do?! As to your other questions, I know I'm amazing (get off the keyboard Robin), but I've never won Mastermind you know.
LM

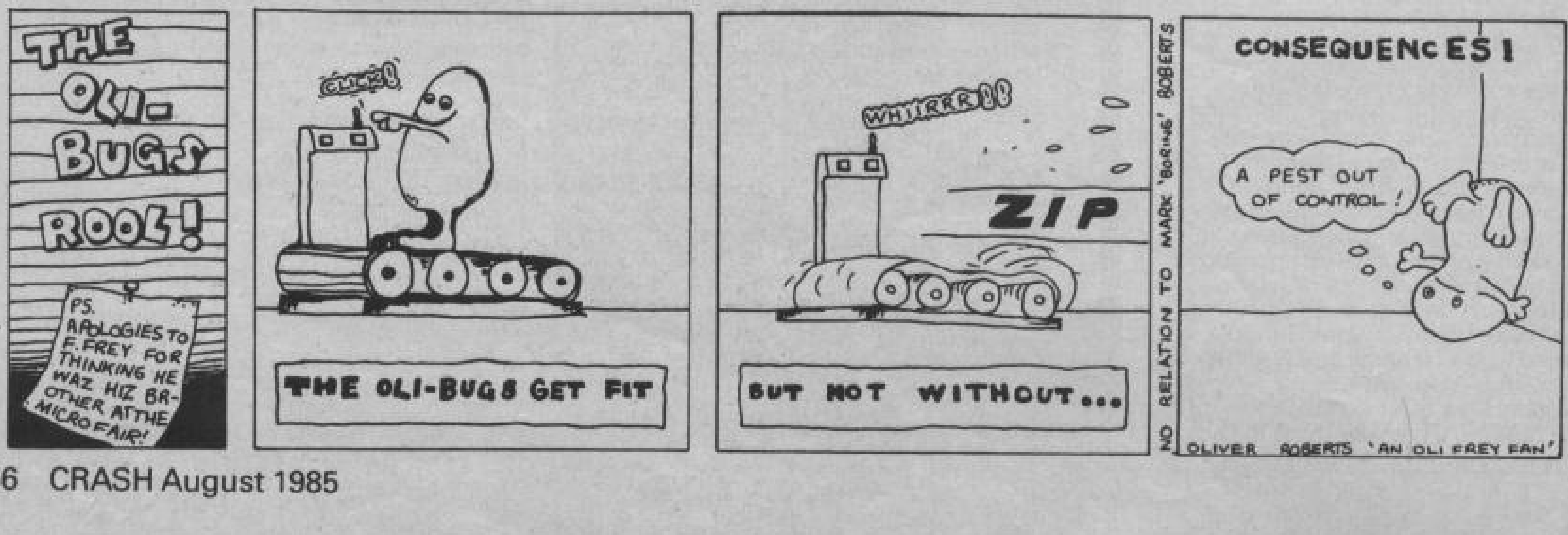
Dear Lloyd
I think CRASH is an excellent magazine, but I have an improvement you could make. Put in the back of your magazine a list of all the software available for the 16 and 48K Spectrum, also showing price, CRASH Rating and the Producer.
Mark Dawson, Woodbridge, Suffolk

In early editions of CRASH we had something called 'The Living Guide', which did all the things you have just mentioned, but it took up so much room we had to stop it. There was always a plan afoot to reinstate it, but the longer it was left, the more frightening the volume of work looked! I'm not saying your suggestion is a bad idea, just that it would look so boring. Still — another upwardly mobile suggestion perhaps . . .
LM

Okay, that's it for this month — famous Lloyd Mangram Outro time, otherwise known as 'The Show Robin Candy How to Write a Good Bye Line' time.
Goodbye.

Lloyd Mangram is a division of Candy Incorporated, and can be reached by writing to CRASH FORUM, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB — or via our Micronet MBX (see masthead).

I received three excellent cartoons this month. This one's from OLIVER ROBERTS, Aldershot, Hants. I think it's great.



PLAYING TIPS from ROBIN CANDY

Another month has passed and that means that I must think up a couple of totally boring paragraphs that pass as an intro just to please the powers that be (incidentally the powers that be have now defected to Zzap!, I always knew that there was something strange going on when I noticed that the offices were gradually being taken other by alien items — namely CBM 64s — and I caught Lloyd Mangram talking to Mark Roberts the other day about what prize he would want for letter of the month). The Minitips dept has finally got off the ground; even though it is a bit small this month I expect it to grow to about a quarter of the Playing Tips.

Once again the Playing Tips are under attack (see Forum) but I'm sure many of you would agree that it is quite nice to have reasonably up to date tips, pokes and maps. I try not to give the whole game away in one month because that isn't fair to the software companies, but what do you do when some people are crying out for MORE up to date tips while others are complaining that you *are* too up to date?

At the time of writing (30th June, a Sunday, after dinner and almost 3pm) there don't seem to be any problems (touch wood) with the pokes that were published in issue 18, and hopefully the ones published this month will be okay. This month's intro doesn't seem to be as big as last month's but I hope the stacks of tips and pokes will make up for it. Just before the main bulk of the tips start I want to say publicly that I was promised a new Playing Tips logo for this month (Derek Brewster gets new Signpost logos almost every other month) but I won't know whether or not I've got one until you read this. *(Oh get on with it—Ed)*

FINDERS KEEPERS

These tips were sent in by C Ferguson of Bournemouth and they detail how to escape from the castle.

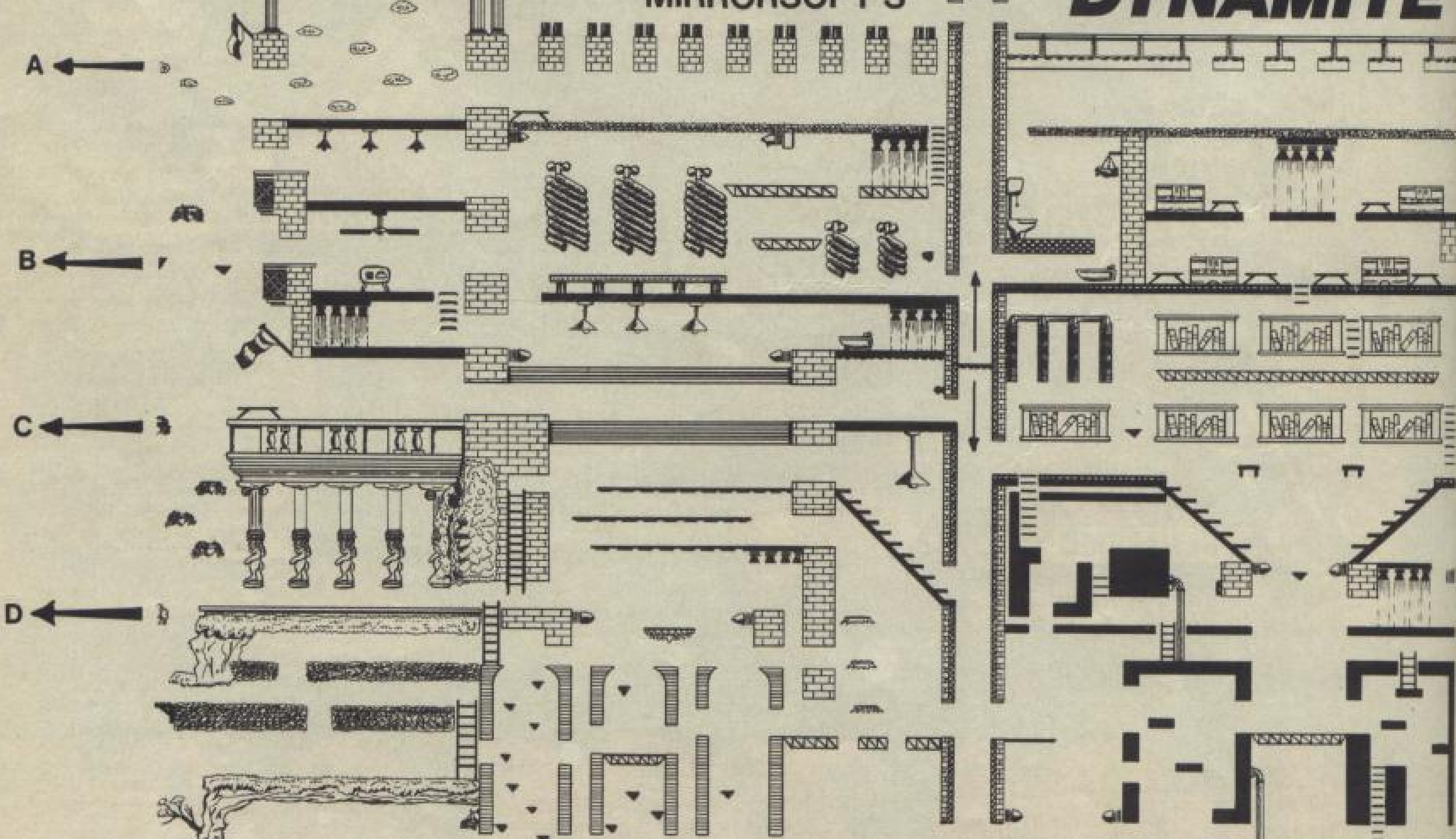
All you have to do to escape is to collect the sulphur, charcoal and the magic flame. The magic flame can be found through a purple door in the cold upper maze. Next enter the green door, which is further up the road and you can buy sulphur off Anna the trader. Now go to the bottom left corner of the maze and go through the white teleport. You should now be in the Slimy lower maze and just above you is a golden door. Go through the golden door and you should be in Gort the trader's room where you can buy charcoal and a trans mat key. Now go to the nearby trans mat room and get teleported back to the teleport room in the castle. From here go to the big puss without boots. Drop the charcoal and the sulphur on the saltpetre and then drop the magic flame. The cat will now disappear thus allowing you to escape.

WRIGGLER

For those of you who can get your copy of *Wriggler* to load here are some tips as sent in by S Lawry (address missing).

GARDEN
Go to the screen with the clockwork spider, then go up and up again. Now go right under the marble but look out for the spider. Next go down and then left to collect the object there, continue left and follow the ant. Then go down and then right. On the screen

MIRRORSOFT'S **DYNAMITE**





with the two clockwork spiders take the bottom right passage then go down and then left. Get the object and you should be in the scrublands but watch out for the nearby white ant.

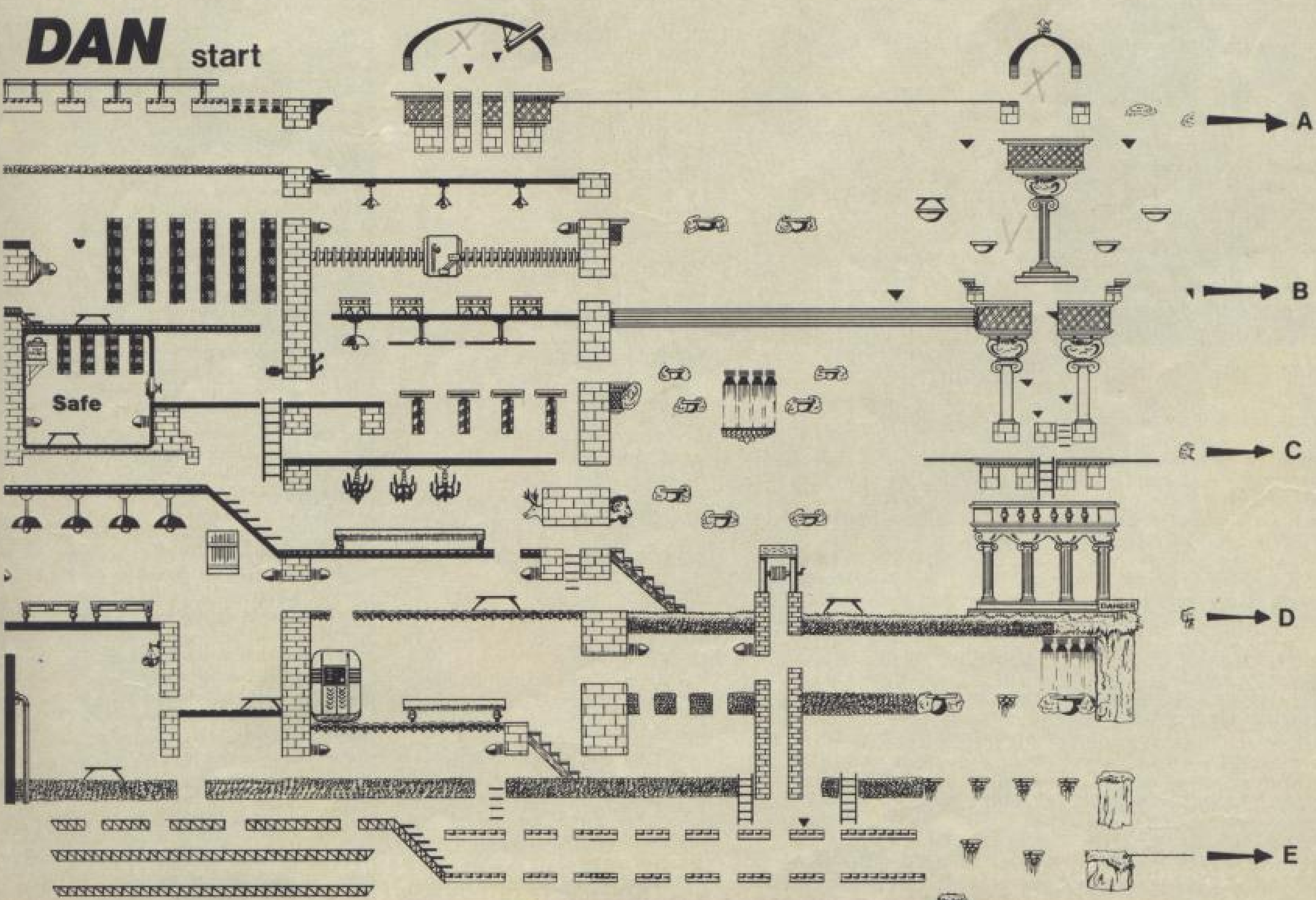
SCRUBLANDS
Watch out for the spider in this area. There are lots of objects here so get your energy up to maximum before proceeding Try and look out for the small worm like objects — these are extra lives. Now go and look for the entrances to the underground. If you cannot find them then just follow these directions. From the screen with the Scarecrows go down and then right. Don't go through the screen with the wasp. Keep on going right, past the vertical entrance to the underground and on the next screen go up and then right because there is an object. Now go back and continue going right. Soon you will find a screen with an entrance. Go right past this on to the next screen and collect the object then return to the screen with the entrance and go down it.

UNDERGROUND
When you get to the vertical shaft don't go down. Fall down onto lower passage and go right but watch out for the ant. Balance so that neither the ant or the spikes can get you and when the time is right wriggle onto the moving floor. Now carry on until you get to the shaft. Go down the shaft until you get to the wasp screen. Go right to get the object and then go back again. Start falling again. Don't bother about the spiders too much. On the next screen go right and down. Get off the spiders screen quickly and go right. Watch out for the wasps and the drips and keep on going until you get to the room with the rising head and moving floor. Balance on the head until the head and floor are together then move right picking up any objects on the way. When you get to the screen that has the head and exits leading up and left, go up. Carry on for a few more screens and you are in the basement.

BASEMENT AND LIFT SHAFTS
When you get to the lift shaft wait for the lift and then use the small colour coded map which tells you where the keys are. To control the lift use up and down. Always drop the key after you have used it to open a door.

When getting key 4 use the moving floor until you fall off, and be ready with the 'pick up' as there is an object to collect as you fall. Wait for the ant to go to the left of the screen then fall down and move right. When you get to the moving floor again, balance on the rock and as the floor moves underneath fall down on to the moving floor, but watch out for the spaceships.

After opening door 8 use the moving floor but watch out for the snake and the drips. On the next screen go down and then go right to end up in a screen with a red blockade. You should have now finished the race and you will be told your finishing



PLAYING TIPS

position in relation to the other maggots.

GENERAL TIPS
The best objects to collect are food and extra lives. Don't bother collecting grave stones, parachutes or the skeleton keys.

BRIAN BLOODAXE

For those of you who are looking for the Holy Grail and the Golden Seat of Power Matthew Newman of Cambridge provides us with the answers.

THE HOLY GRAIL
When you have found the Crown jewels you should proceed to the snooker room and go left. If the Holy Grail isn't in here it will be in the room above one with the tank, scissors, 3 baddies and 2 bunnies, in the room with the ship. Once you have the Holy Grail you must take it back to the room with the angel and the message 'Bring it hither'. Now you should get a message to go and find the golden seat of power.

THE GOLDEN SEAT OF POWER
Go to the room to the right of the snooker room and it is in the bottom left hand corner. Normally the seat is white but you can't pick it up until you have got the Holy Grail. Once you have got the golden seat of power take it to the well and jump down it to complete the game.

STARION

These anagrams and passwords for *Starion* were sent in by Tim Dawson **of Farnham Common. He did send in the solution but it is too much to print all in one go. For the first time readers Block 1 Grid 1 can be found in issue 15. Just one last word before the secrets are revealed please don't send in any more *Starion* solutions!**

BLOCK 1 GRID 2
AD 1588: ARMADA— Drake bowls out the Spanish
AD 1815: WELLINGTON— Duke gets his feet muddy at Waterloo
AD 0814: EGBERT— Name him king of all England
AD 1883: KRAKATOA— Big bang breaks Indonesian toe
AD 1776: SEAL— Endorse the Declaration of Independence
AD 1587: AXE— Get Mary ahead in Liz's chopping basket
AD 1764: COAL— What's fuel for James' steam engine
AD 1086: PREFACE— Begin the Domesday Book
AD 1965: LEONOV— Weightless walker
GRID PASSWORD: SPACEWALK

BLOCK 1 GRID 3
AD 1924: HITLER— Author of Mein Kampf
AD 1783: BALLAST— Weigh the first balloon
AD 1879: LAMP— Edison said 'Let there be light'
AD 1942: ATOM— Fermi's doing the splits
AD 1547: IVAN— The Terrible Czar
AD 1982: SPECTRUM— Sinclair's colour baby
AD 1901: S— Marconi's signal across the waves
AD 1919: TREATY— Agreement in Versailles
AD 1889: EIFFEL— He towers over the World Exhibition
GRID PASSWORD: ESTABLISH

BLOCK 1 GRID 4
AD 1953: EVEREST— Hilary's lost his mountain
AD 1789: CAKES— The revolting French are hungry
AD 1840: PENNY— Buy the first black stamp
AD 1983: AVON— Thrust two without Blake's engine
AD 1986: HALLEY— Bill's comet
BC 2222: UMBRELLA— Noah's getting wet
AD 1888: RUBBER— Erase Dunlop's pneumatic tyre
AD 1896: AERIAL— Marconi's washing his radio
AD 1565: TOBACCO— John Hawkins is smoking
GRID PASSWORD: PARACHUTE

BLOCK 1 GRID 5
AD 1885: PETROL— Karl Benz's car won't start
BC 0219: ALPS— Hannibal's elephants are here
AD 0982: ERIC— Red man finds green land
AD 2001: ODYSSEY— A space
AD 1949: NATO— An organised treaty in the North Atlantic
AD 1898: RADIUM— Curried discovery
AD 1959: HAWAII— Grass skirts in the fiftieth state
BC 0035: ASP— Bites Cleopatra in the milky way
AD 1895: GILLETTE— Invents the safety razor
GRID PASSWORD: ORPHANAGE

BLOCK 1 GRID 6
AD 0079: VESUVIUS— She blows her top over Pompeii
BC 0064: NERO— He fiddles while Rome burns
AD 1897: ELECTRON— JJ Thompson's single charge
AD 1869: TABLE— Rest for Mendeleyev's periods
AD 1867: ALASKA— America's bargain from Russia
AD 1944: D— Big Day in Normandy
AD 1999: ECLIPSE— Momentary darkness, just, in Cornwall
AD 1871: RIBBONS— FA cup is undressed
AD 1945: URANIUM— Ingredient of the atom bomb
GRID PASSWORD: ADVENTURE

BLOCK 1 GRID 7
AD 1773: TEA— Getting thirsty at Boston party
AD 1867: NOBEL— Dynamite without ring
AD 1756: CALCUTTA— This black hole is in India
AD 1851: EXHIBIT— Show off great crystals at the palace
AD 1812: CANNON— Overture noise makers
AD 1922: INSULIN— Pancreas gives a hope for diabetics
BC 0163: ROSETTA— Hieroglyphic stone for Ptolemy V
AD 1997: CHINA— Hong Kong takes the slow boat
AD 1042: EDWARD— He confesses to being crowned
GRID PASSWORD: ECCENTRIC

BLOCK 1 GRID 8
AD 1796: NEEDLE— Jenner's cowpox pricker
AD 1912: ICEBERG— Titanic needs a target
AD 1969: EAGLE— Big bird gives a giant leap for mankind
AD 1929: CRASH— Black Tuesday in Wall street
AD 1066: ARROW— One in the eye for Harold
AD 1953: ORB— The Queen shall have a ball
BC 0543: TRIANGLE— Pythagoras has some squares
AD 1492: BAHAMAS— To them he sails the Ocean blue
AD 0004: MANGER— What a messiah — no crib for a bed
GRID PASSWORD: COMBINATE

BLOCK 1 GRID 9
AD 1911: POLE— Amundsen's southern flag holder
BC 0044: IDES— Caesar beware the fifteenth of March
AD 1805: NELSON— A hardy man dies at Trafalgar
AD 1969: BOOM— Concorde goes supersonic
AD 1900: HYDROGEN— Zepplin's gas
AD 1454: INK— Guttenburg's Bible is too faint
AD 1837: MORSE— Dashed clever telegraph man
AD 1914: ARCHDUKE— Ferdinand shot dead without his title
AD 1682: APPLE— Newton sees the fruits of gravity
GRID PASSWORD: AMPHIBIAN
BLOCK PASSWORD: AEROSPACE

ROCKY HORROR SHOW

Martin Stokes of Solihull sent in these tips to help you complete the game. Has anyone seen the CBM version? It is enough to make you feel sorry for them.

Around the house you will find many keys, these keys open any door. Also you will find small flashing brick-like things which are parts of the De-Medusa machine. With one of these bricks go to the room with a big curtain in it and walk up to the curtain. The curtain will now rise and reveal the De-Medusa machine and your friend. Place the part you have collected onto the De-Medusa machine and then go and look for another piece.

Whenever the temperature gauge reaches 0, Eddie the mad biker thaws out and proceeds to race around the house and occasionally knocks you down. The way to remedy this is to get to the freezer room and press the flashing box. The only problem is getting there. Go to the top floor and into the room with the energy. Now climb up the ladder and press the button at the top — you will have to pass the energy beam quickly while it is switched off otherwise you will be killed. Go left through Frank n' Furter's laboratory and then through the next room as well. You will then be in the freezer room. A quick way to escape from here is to go back into the next room and press the button that says 'Don't Press this' twice — this will transport you back to a room on the ground floor.

When you bump into characters they will say lines from the film but other than that they rarely harm you, but sometimes they take your clothes which you will get back when you collect the object that looks like a brain. Beware of the butler, Riff Raff, because he fires lasers at you when you are on screen.

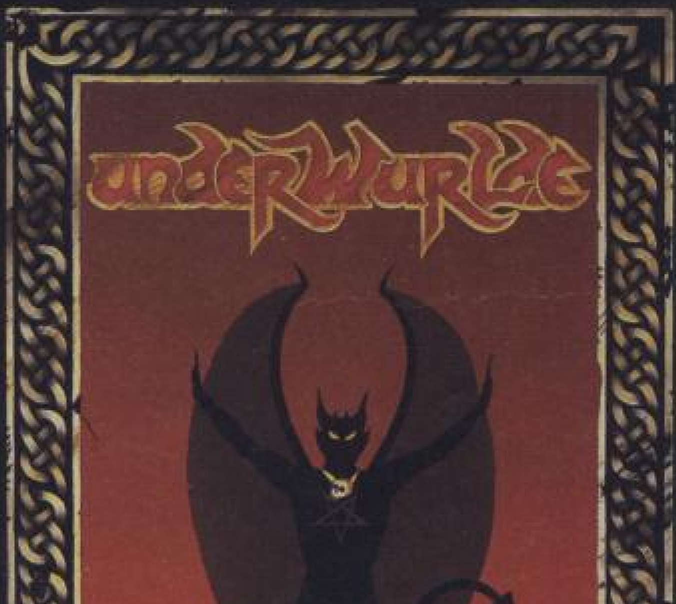
64

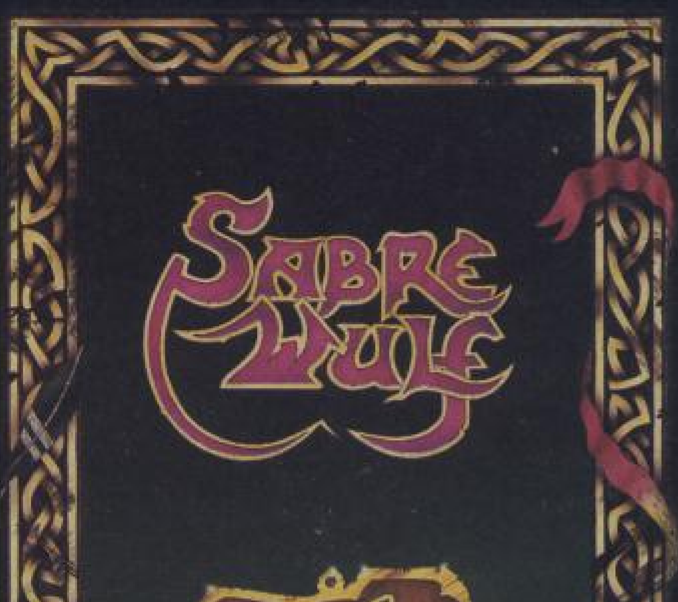
ULTIMATE
PLAY THE GAME

48K SINCLAIR ZX SPECTRUM









"ALIEN 8", "KNIGHTLORE", "UNDERWURLDE" and "SABRE WULF" recommended retail price £9.95 inc VAT. Available from W.H.SMITHS, BOOTS, J.MENZIES, WOOLWORTHS and all good software retail outlets. Also available from ULTIMATE PLAY THE GAME, The Green, Ashby-de-la-Zouch, Leicestershire LE6 5JU (P&P are included) Tel: 0530 411485

SHADOWFIRE

THE MAP




SECURITY CONTROL
MARSHALL XPATOR'S COMMAND POST
BARRACKS BRIEFING ROOM
OFF DUTY LOGGING
LT.'S QUARTERS
ZOFF ARMOURY
ROBOT SECURITY
FLIGHT CONTROL SECURITY CUT OFF
FIGHTER CONTROL
ROBOT CONTROL COMPUTER
COMPUTERS REPAIR ROOM
SIGNALLING COMPUTER
PROVISIONS AND STORES
TRANSLATION COMPUTER
NAVIGATORS QUARTERS
MILITARY SECTION RECEPTION
CAPTAIN'S CABIN
CANTEEN AND BAR
MILITARY SECTION CHECK
COMPUTER SECURITY
ROBOT TO HUMAN LIAISON
FLIGHT CONTROL SECURITY CUT OFF
FLIGHT PERSONNEL QUARTERS
ESCAPE SHUTTLE COMPUTER
PILOT AREA SECURITY
SKY FORTRESS BRIDGE
ESCAPE SHUTTLE AIRLOCK
ESCAPE SHUTTLE SUIT LOCKER
SCIENCE AND INFORMATION ACCESS
ESCAPE SHUTTLE NAV. COMPUTER
SCIENCE CENTRE
INFORMATION CENTRE
SUIT LOCKER
SHUTTLE BAY
MAP DRAWN BY OLIVER FREY BASED ON

PLAYING TIPS

MINITIPS DEPT

This section hasn't had time to take off properly yet but here are a few minitips I've received this month.

SPYHUNTER
From **James Beaumont** of Manchester.
When starting up just follow the road. Eventually you will arrive at a straight part of the road; slow down and a weapons van should appear. Drive up into the back of it and you should receive a new weapon. However, if you die then you will lose the weapon.

From **Matthew Rogers** of Orpington.
After you have received a weapon from the weapons van quickly drive back into the van and keep pushing up. The truck should now start to move jerkily with you inside. Using this method you will never crash but there is just one snag; when you reach the 'bridge out' section you will have to sacrifice one of your many lives but you can then repeat the same sequence of events to get to higher levels in the game easier.

AIRWOLF
From **Andrew Hannis** of New Malden.
When you go to shoot one of the power boxes to open a wall, shoot it once and move out of the screen. If you now move back into this screen you will see that the box has magically reappeared and you can now shoot it again to get some more points. If you keep repeating this sequence then you can build up some really high scores.

SHORT FUSE
From **Justin Cade** of Staines.
The necessary codes to get to later screens are:
1 000
2 367
3 157
4 049
5 281

DOOMDARK'S REVENGE
From **Michael Evers** of Aberdare
Load in a saved game from *Lords of Midnight* into *Doomdark's Revenge* to get some weird things happening. Also Morkin can be found on the Plains of Avoril which can accessed via the pit of Fildrak which is in the NE corner of Icemark.

KNIGHTLORE
From **David Moritz** of Harrow
When in the Wizard's room drop any object and the spell in the cauldron will never come out of the cauldron as long as an object is on the floor. This means you can walk around the Wizard's room when ever you wish even if you are a Werewolf.

DECATHALON
No name or address
When a game has ended then press a number from 0 to 9 and you should then restart the game with three athletes and your old score. This means you can achieve any score you wish but after a while the qualifying times become too difficult.

BRUCE LEE
From **Gordon Mackay** of Aberdeen
On screen 15 of the CRASH map in issue 16 there are two flashing yellow balls. If you run up to them you will get an extra life. Now go out of the room and re-enter and do the same trick. You can repeat the same sequence several times to get extra lives.

WIZARD'S LAIR
From **Simon Hayward** of Stockport
In addition to the levels detailed in a previous issue of the Playing Tips there is another level called LYONS. You have to go here when you have got all the pieces of the golden Lion

ZOMBIE ZOMBIE
From **Simon Hayward** of Stockport
There are two cities in this game. To get the other one press P and with your finger still on P press Caps Shift and you will get a set of two speech marks. Now enter in caps SPACEMAN (sometimes you have to do this more than once for the computer to accept it). You should now have a totally different city.

VEGAS JACKPOT
From **Alistair Mills** of Daventry.
When you have won an amount of money and you wish to gamble it, use this formula to be successful. Press any key on the keyboard and you would have either won or lost. If you have won then take your finger off the keyboard and repeat this again. If you have lost then take your finger off the key you were holding down then quickly press G and you will always win. This means that every time you win some money you can easily gamble it up to the two pounds jackpot.

STARSTRIKE

The Realtime mafia have at last forced me to publish this tip; I have had it for months but I keep forgetting to put into the tips section. Before I forget again here it is:
First of all pause the game now type in 'i wanna cheat' complete with spaces. Now you should have an infinite supply of shields. If this gets a bit boring then you can switch the cheat mode off by pausing the game again and typing 'boring' on the keyboard.

MINDER

These tips sent in by Neil Pearson **of Keighley should help you when bargaining with the other dealers in** *Minder*. **They tell you what time each dealer will be at their lockups.**

8am: **Waring**
9am: **Waring/ Page/ Tonick/ Watt**
10am: **Page/ Tonick/ Watt**
11am: **Page/ Tonick/ Watt**
12noon: **Tonick**
1pm: **Tonick/ Carr**
2pm: **Tonick/Oddgood**
3pm: **Takeall/ Tonick/ Carr**
4pm: **Tonick/ Oddgood**
5pm: **Waring/ Carr**
6pm: **Waring/ Carr**
7pm: **Waring/ Carr**
8pm: **Carr**
9pm:
10pm: **Bott**
11pm: **Bott**
12midnight: **Bott**
1am: **Bott**

When a dealer isn't in his lockup he will be at the Winchester Club.

SYSTEM 15000

For those of you who are puzzling over *System 15000* **you can use these tips sent in by** Martin Barrio **of Rhuddlan to complete the game.**
First of all you must phone the reserve Manhattan Bank. The number to use is 010-1(212)-976-5757. Please note that it is an American phone number so the dialing tone is different.
Now you must enter the bank code which is M8R. Then the transfer code TFTB24 to transfer from VINCHETTA to COMDATA. The bank is MIDMINSTER, the amount $1500000 and the transfer code 2175.
The program now confirms the transfer and you have completed the game.

DUN DARACH

These tips were compiled with the help of Michael Mitchell, Gary Macintosh **both of Morayshire,** Keith Walker **of Birmingham,** Kevin Penton **of**

Situations Vacant

WANTED

COMBAT READY STARFIGHTER PILOTS

GLASS Rating over 100K mandatory.

Become a **GAME LORD** and save the human race. Standard bounties apply.

Contact: Captain Quicksilva,
GLASS,
Alpha 3.

68


CRASH
MICRO GAMES ACTION


FIGHTING SPECTRUM
FREY.
PRESENTED BY

PLAYING TIPS

Horninglow, Craig Rogers of Hayes and . . . myself.

To find Teth you must first go to the Old Quarter and buy or steal a statue. Now take this to the Soke or Ratha de and follow the rat that wanders the streets. In Claw Lane the rat will disappear — for a few seconds stand on the spot that it disappeared from and press Enter; you will now be in Darach Down. Inside Darach Down is Teth. Give Teth the statue and in return he will give you the d—key; this unlocks the door in the castle.

Dainn can be found behind an invisible door in Park Lane. Give Dainn a lyre and in return he will give you the shield Midir. Take this to the room Hail Midir and place it on the table in there and you should receive the m—key. The m—key opens an invisible door on Cross Street.

Buy a Mole skin from the skinner and give this to Bren in return for a map. Now earn enough money to buy the Platinum and give this to Bren for another map and the message 'Galacia is far'. Give this map to Ryde in return for the shield Belinus. Take this to the Hail Belinus room and drop on the table in there in return for a clue.

To gain as much money as you wish go to the gambling houses in Iomain. Now drop all your money on table B and press 6 to return to the menu. Save the game then return back to where you were. Keep gambling and saving the game when you win and reloading a saved game when you lose. This way you can easily build up enough money to purchase anything you want.

To speed up the interest rate, bank some of your money and then carry out some of the other tips while it is day (signified by the torches being out) — press 6 and then 1. This will take you to the menu and then back into the game. When you re-enter the game the torches will flicker on and you will collect interest for the whole day. Using this method it is possible to get your 1% interest twice a day.

POKES CORNER

Here at long last are the results of the pokes competition. Due to lack of space (I'm told) only a few pokes can be printed this month (hopefully in their correct form) and space permitting some more pokes will be printed next month.

WINNERS
1st **Phil Churchyard** of Grantham
2nd **Paul Stephenson** of Leeds
3rd **Steven Gilham** of Lytham

The three runners up were:
Howard Grist of Sheffield
R Robinson of Barnsbury
Jonathon Hatcher of Bournemouth

TECHNICIAN TED

These pokes were sent in by the winner of the competition Phil Churchyard

```
10 CLS: RESTORE
20 LET TOT = 0: FOR I = 23296
TO 23467: READ A: POKE I,A:
LET TOT= TOT + A: NEXT I
30 IF TOT <> 16121 THEN
PRINT "ERROR IN DATA!!!!":
BEEP 1,0: STOP
40 PRINT AT 0,0; "START
TECHNICIAN TED TAPE"
50 RANDOMIZE USR 23296
1000 DATA 221, 33, 0, 0, 17
1010 DATA 17, 0, 62, 0, 55
1020 DATA 205, 86, 5, 221, 33
1030 DATA 203, 92, 17, 224, 2
1040 DATA 62, 255, 55, 205, 86
1050 DATA 5, 33, 96, 91, 17
1060 DATA 182, 94, 1, 32, 0
1070 DATA 237, 176, 62, 195, 50
1080 DATA 195, 131, 33, 147, 91
1090 DATA 34, 196, 131, 62, 201
1100 DATA 50, 38, 95, 205, 21
1110 DATA 95, 205, 128, 93 ,49
1120 DATA 0, 92, 221, 33, 0
1130 DATA 128, 17, 195, 3, 62
1140 DATA 255, 55, 20, 8, 21
1150 DATA 243, 62, 15, 211, 254
1160 DATA 33, 0, 128, 229, 219
1170 DATA 254, 31, 230, 32, 246
1180 DATA 2, 79, 191, 195, 107
1190 DATA 5, 32, 73, 78, 70
1200 DATA 73, 78, 73, 84, 69
1210 DATA 32, 76, 73, 70, 69
1220 DATA 32, 80, 79, 75, 69
1230 DATA 83, 32, 66, 89, 32
1240 DATA 80, 72, 73, 76, 32
1250 DATA 32, 32, 32, 32, 175
1260 DATA 50, 114, 171, 62, 195
1270 DATA 50, 178, 172, 33, 5
1280 DATA 173, 34, 179, 172, 195
1290 DATA 101, 170, 62, 33, 50
1300 DATA 64, 140, 33, 189, 77
1310 DATA 34, 65, 140, 62, 195
1320 DATA 50, 90, 140, 33, 129
1340 DATA 91, 34, 91, 140, 195
1350 DATA 64, 140
```

HERBERT'S DUMMY RUN

The next two sets of pokes are both off the same person; the CRASH hacker himself Keith Walker. **Just type in the listing and save it to tape (for future use), then run the program and start your** *Herbert's Dummy Run* **tape. Once the** *Herbert's Dummy Run* **tape has loaded you will have infinite lives**

```
10 CLEAR 65535
20 PRINT AT 9,3; "PLAY IN THE
HERBERT MASTER TAPE"; AT
11, 10; "FROM THE START"
30 RESTORE
40 FOR N = 23296 TO 23321:
READ A: POKE N,A: NEXT N
50 DATA 221, 033, 000, 000, 017
60 DATA 017, 000, 175, 055, 205
70 DATA 086, 005, 221, 033. 224
80 DATA 252, 017, 063, 002, 062
90 DATA 255, 055, 205, 086, 005
100 DATA 201
110 RANDOMIZE USR 23296
120 POKE 65093, 243: POKE
65100, 190
130 FOR N = 65271 TO 65299:
READ A: POKE N,A: NEXT N
140 DATA 017, 128, 091, 033, 254
150 DATA 083, 026, 174, 203, 164
160 DATA 174, 203, 228, 018, 043
170 DATA 019, 123, 254, 154, 032
180 DATA 241, 062, 048, 050. 213
190 DATA 202, 195, 148, 091
200 RANDOMIZE USR 65093
```

NODES OF YESOD

This routine sent in by Keith Walker **gives you the option to choose whether you want infinite lives or any number of lives up to 255. Just type in the listing and save it to tape. Then run the program and start your** *Nodes of Yesod* **tape from the start.**

```
10 CLEAR 65535
20 RESTORE
30 FOR N = 23296 TO 23321:
READ A: POKE N,A: NEXT N
40 DATA 221, 033, 000, 000, 017
50 DATA 017, 000, 175, 055, 205
60 DATA 086, 005, 221, 033, 186
70 DATA 244, 017, 250, 002, 062
80 DATA 255, 055, 205, 086, 005
90 DATA 201
100 PRINT AT 4,13; FLASH 1;
"SELECT"
110 PRINT AT 8,7;
"1 UNLIMITED LIVES"
120 PRINT AT 10,7; "2 NUMBER
OF LIVES"
130 PRINT AT 15,8; "PRESS KEY
1 OR 2"
140 LET A$ = INKEY$: IF A$ = ""
THEN GOTO 140
150 BEEP .1,1: IF A$ < "1" OR A$
> "2" THEN GOTO 140
160 GOTO 100 + 100 * VAL A$
200 RESTORE 1000: CLS
210 GOTO 400
300 RESTORE 2000:CLS
310 PRINT AT 9,2; "ENTER Nos
OF LIVES (1 TO 255)
320 INPUT B$: BEEP .1,1
330 IF B$ = "" THEN GOTO 320
340 FOR C = 1 TO LEN A$
350 IF B$(C) < "0" OR B$(C) >
"9" THEN GOTO 320
360 NEXT C
370 LET LIVES = VAL B$
380 IF LIVES < 1 OR LIVES > 255
THEN GOTO 320
400 CLS
410 PRINT AT 9,4; "PLAY IN
NODES MASTER TAPE"; AT
11,10; "FROM THE START"
420 RANDOMIZE USR 23296
430 FOR N = 63218 TO 63225:
READ A: POKE N,A: NEXT N
440 RANDOMIZE USR 63201
1000 DATA 062, 000, 050, 149,
127
1010 DATA 195, 000, 226
2000 DATA 062, LIVES, 050, 205
2010 DATA 134, 195, 000, 226
```

WORSE THINGS HAPPEN AT SEA

his little routine was supplied by one of the runners up in the poke competition. Howard Grist **also supplied several other routines of which some will be printed next month.**

```
10 CLEAR 25383: LOAD "" CODE
25384
20 FOR A = 23296 TO 23307:
READ B: POKE A,B: NEXT A
30 RANDOMIZE USR 23296:
CLEAR 29999: NEW
40 DATA 17, 48, 117, 1, 194, 101,
33, 88, 152, 237, 176, 201
```

When the 'Sinclair Research Ltd' message appears on screen then enter these pokes.

POKE 35443,0 for infinite droids
POKE 35303,0: POKE 33221,O for infinite energy
POKE 30008,201 this stops the ship from sinking when thereis too much water in it.

Sadly, I have now filled up my allotted space for Pokes this month but hopefully there will be some more next month. That seems to be it for another month and I've just about run out of things to say (I've just written the intro you see — I always write the intro as the second to last thing I do so that I know exactly what has gone into a month's section — clever eh)? For those of you who haven't got the address to send your info to (I've forgotten to print it in recent months) it is:
ROBIN CANDY'S PLAYING TIPS,
PO BOX 10, LUDLOW,
SHROPSHIRE SY8 1DB

So get scribbling and wing your words to me and you never know you could win a mega amazzzing T—shirt.

HOTLINE TOP 30 FOR AUG



1 (—) **SHADOWFIRE** Beyond
2 (4) **EVERYONE'S A WALLY** Mikro-Gen
3 (1) **ALIEN 8** Ultimate
4 (2) **KNIGHT LORE** Ultimate
5 (7) **BRUCE LEE** US Gold
6 (9) **STARION** Melbourne House
7 (—) **SOFT AID** Various
8 (17) **MOON CRESTA** Incentive
9 (—) **DUN DARACH** Gargoyle Games
10 (11) **DRAGONTORC** Hewson Consultants

Beyond's *Shadowfire* romps home, coming from nowhere to head both charts in what must be the most impressive entry yet! **Incentive's** *Moon Cresta* continues its rise up the chart, coming from nowhere last month into seventeenth position and edging up to number eight slot this month while *Confuzion* from the same stable jumps in at eleven. *Gyron*'s now half way up, continuing its climb. At the bottom end of the chart there has been a bit of a sort out, as quite a few titles fall off the end of the chart, banished to the unprintable forties and fifties. A total of nine new contenders appear this month in what must be a real summer-time shakeout.

11 (—) **CONFUZION** Incentive
12 (14) **WORLD SERIES BASEBALL** Imagine
13 (5) **SPYHUNTER** Imagine
14 (3) **MATCH DAY** Ocean
15 (30) **GYRON** Firebird
16 (6) **UNDERWURLDE** Ultimate
17 (12) **DOOMDARK'S REVENGE** Beyond
18 (—) **TIR NA NOG** Gargoyle Games
19 (—) **JONAH BARRINGTON'S SQUASH** New Generation
20 (—) **HERBERT'S DUMMY RUN** Mikro-Gen

21 (16) **DT'S DECATHLON** Ocean
22 (—) **ROCKY HORROR SHOW** CRL
23 (26) **MATCH POINT** Psion
24 (8) **SKOOL DAZE** Microsphere
25 (18) **LORDS OF MIDNIGHT** Beyond
26 (29) **CHUCKIE EGG 2** A & F
27 (—) **MONTY MOLE** Gremlin Graphics
28 (—) **AIRWOLF** Elite
29 (23) **PYJAMARAMA** Mikro-Gen
30 (—) **DEATH STAR INTERCEPTOR** System 3

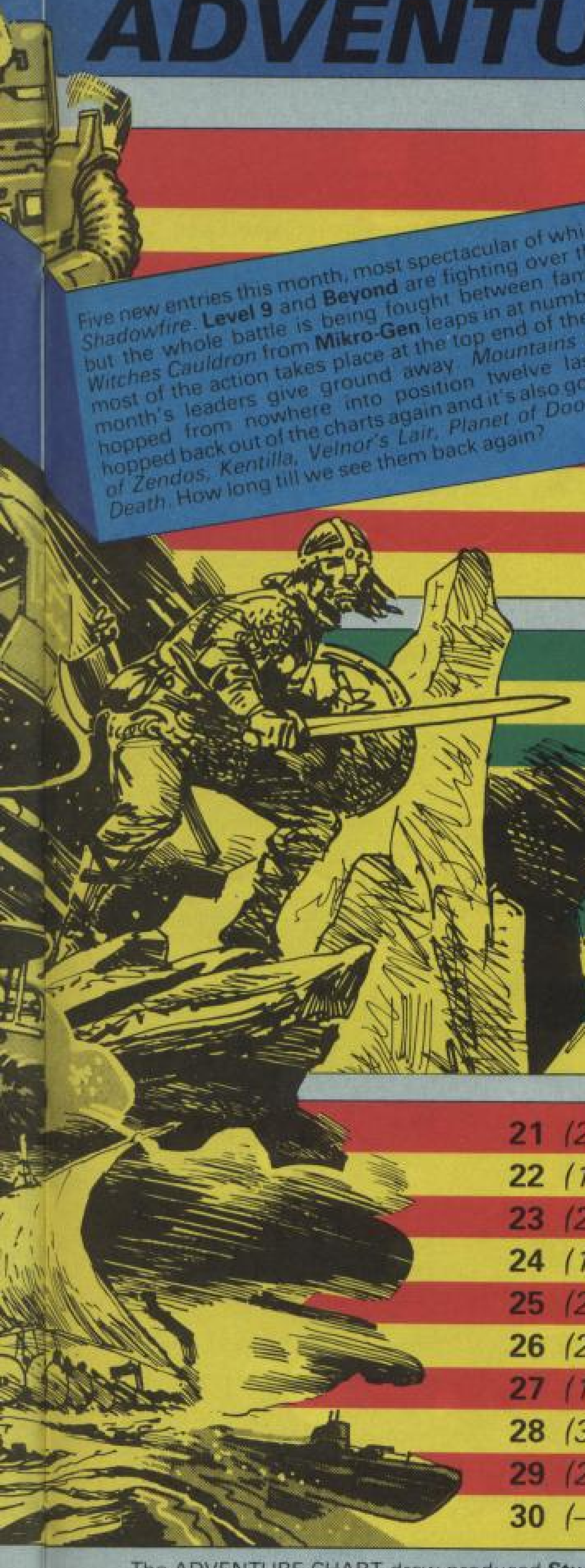
This month's HOTLINE draw winner is **Simon Law** from Canley in Coventry, and the four runners up are: **R Williams** from Warley in the West Midlands; **William Phipps** of Oxford; **W G Allen** from Blackheath in London and **Stephen Graham** who hails from Carlisle in Cumbria.

BRILL 'N' FAB HOTLINE PRIZES!!

The CRASH HOTLINE & ADVENTURE CHART is Britain's most important popularity chart. It depends entirely on your support and we need your votes. There are two methods for voting, either use the CRASH HOTLINE PHONE-IN, or cut out the special coupons which you can find on page 112
Whether you phone or write in, all the names go into the Hotline Bag to be drawn monthly. First out in both charts receives £40 WORTH OF SOFTWARE plus a CRASH T-SHIRT. The four runners-up in both charts each receive a CRASH T-SHIRT and THREE free issues of CRASH Magazine (a kind of mini-subscription — existing subscriptions will be appropriately extended).



ADVENTURE TOP 30 CHART



Five new entries this month, most spectacular of which has to be *Shadowfire*. **Level 9** and **Beyond** are fighting over the top slots, but the whole battle is being fought between familiar names. *Witches Cauldron* from **Mikro-Gen** leaps in at number seven and most of the action takes place at the top end of the chart as last month's leaders give ground away. *Mountains of Ket* which hopped from nowhere into position twelve last month has hopped back out of the charts again and it's also goodby to *Runes of Zendos, Kentilla, Velnor's Lair, Planet of Doom and Ship of Death*. How long till we see them back again?

1 *(—)* **SHADOWFIRE** Beyond
2 *(4)* **DOOMDARK'S REVENGE** Beyond
3 *(—)* **EMERALD ISLAND** Level 9 Computing
4 *(17)* **COLOSSAL ADVENTURE** Level 9 Computing
5 *(6)* **LORDS OF TIME** Level 9 Computing
6 *(1)* **DRAGONTORC** Hewson Consultants
7 *(—)* **WITCHES CAULDRON** Mikro-Gen
8 *(5)* **LORDS OF MIDNIGHT** Beyond
9 *(8)* **RETURN TO EDEN** Level 9 Computing
10 *(9)* **TIR NA NOG** Gargoyle Games
11 *(3)* **GREMLINS** Adventure International
12 *(20)* **SHERLOCK** Melbourne House
13 *(2)* **OUT OF THE SHADOWS** Mizar
14 *(13)* **AVALON** Hewson Consultants
15 *(11)* **SPIDERMAN** Adventure International
16 *(23)* **HOBBIT** Melbourne House
17 *(10)* **SNOWBALL** Level 9 Computings
18 *(—)* **QUEST FOR THE HOLY GRAIL** Dream
19 *(7)* **VALKYRIE 17** Ram Jam Corporation
20 *(12)* **MOUNTAINS OF KET** Incentive
21 *(28)* **ORACLES CAVE** Dorcas
22 *(16)* **URBAN UPSTART** Richard Shepherd
23 *(25)* **EUREKA!** Domark
24 *(18)* **TWIN KINGDOM VALLEY** Bug Byte
25 *(24)* **THE HULK** Adventure International
26 *(21)* **GOLDEN APPLE** Artic
27 *(15)* **HAMPSTEAD** Melbourne House
28 *(30)* **ESPIONAGE ISLAND** Artic
29 *(27)* **VALHALLA** Legend
30 *(—)* **INCAS CURSE** Artic

The ADVENTURE CHART draw produced **Stuart Wright**'s name as the overall top man and he comes from Manchester. **Stephen Orchard** whose home is in Dinas, **N. Arrowsmith** of Brandon, **Michael Macadie** of Stockton, Cleveland and **S. W. Meale** from Hoddesdon complete the quintet of winners this month by taking on the role of runners up. Well done, all!



Uncle Groucho Completed, Hidden Hollywood star Mickey Mouse
Atic Atac completed 92%
Trans Tower completed, treasure found
DT's Decathalon Day 1 100meters 10.94 secs; long jump 9.34m; shot putt 26m; high jump 2.45m; 400meters 39.46 secs; Day 2 110meters hurdles 13.55 secs; pole vault 5.11 m; discus 75.9m; Javelin 70.01m; 1500 meters 278.53 secs
Hobbit 5%
Adam Bennett, Charfield, Gloucs

Bruce Lee 300,000-odd, completed nine times
Raid Over Moscow 100,000
Herbert's Dummy Run 38 Jelly babies
Spiderman completed
Lords of Midnight completed in 24 days
Avalon completed, supreme lore seeker
Hulk completed
Oracles Cave completed
Scott Andrews, Forest Hill, London

Avalon Supreme Lore Seeker
Time Gate 13,040
Planetoids 185,200
Manic Miner 16th level, 22,956
Jetpac 22,670
Cookie Baked cake, 19,280
Football Manager top of Division One in 5 seasons, 2 FA cups
S Millinship, Arnold, Nottingham

Knightlore completed, 73%, 22 days
Underwurlde completed, 35%, 29,330
Sabre Wulf completed, 69%, 115,690
Atic Atac completed, 83%, 30,150
Alien 8 23 rooms activated
Ant Attack completed
Dark Star 29 planets liberated
Manic Miner completed 3 times in a row, eight men left
Mark Franklin, South Harrow

Tapper 60,000 on easy
Tir Na Nog completed
Alien 8 completed
Underwurlde completed at 64%
Bruce Lee completed ten times
Avalon Apprentice Wise One
Anonymous, but ugly!

Bruce Lee 266,750, wizard killed 5 times
Sabre Wulf 82% completed
Knight Lore 88% completed
Match Day Amateur, won 12-0; pro won 4-2; International won 5-4
Chequered Flag Cambridge Ring, 50.62 secs; Silverstone 1.02.49 secs
Spy Hunter 375,250
Chris Burrow, Basildon

Moon Buggy Completed, 21,000
Everyone's a Wally £710, morning tea break, letters REA
Bugaboo 49 secs
Quackshot 25,135
Pitfall II 137,160
Stop the Express stopped 3 times
Sorcery completed
Helichopper 17,171
Paul Chaney, Bletchley

Atic Atac completed 99%
Underwurlde completed 42%, all exits
Alien 8 22 chambers activated
Steve Davis 114 break
Air Wulf completed 3 times
Hunchback I 7,250,000
Tir Na Nog completed
Match Day unbeaten on every level
Frank 'N' Stein level 19
Michael Tattersall, Barnoldswick

Lunar Jet Man 101,980
Booty 36 objects
Atic Atac completed 86%
Harrier Attack 31,100
Jet Pac 168,910
TLL 17,008
A Eckton and J Rush

Chuckie Egg 216,000
Atic Atac 82%
Match Day Won FA Cup
Kung Fu Black Belt, level 7
Bruce Lee 1,027,350
Pyjamarama 56%
Spy Hunter 238,385
Anthony Clayton, Co Durham

Sabre Wulf completed
Spy Hunter 358,425
Match Day 5 minutes each way: Amateur 14-0; Pro 12-0; International 8-0
PSSST! 72,820
Pinball Wizard 14,450
Chuckie Egg 238,280
Ant Attack 10 girls
Booty 40items
Neil Baines, Radcliffe

Shadowfire completed
Lords of Midnight completed
Avalon completed
Dragontorc nearly completed
Underwurlde completed
Bruce Lee completed 28 times
Elliott Gates, Southport

Atic Atac completed 98%
Bruce Lee 415,750
Spy Hunter 287,350
Kung Fu Black Belt, level 8
Lords of Midnight completed
Minder £5,472
Raid Over Moscow 209,760
Ian Weller, Glasgow

PSSST! 222,540
Bugaboo 27 seconds
Knightlore completed 80%
Underwurlde completed 36%
Sabre Wulf completed 100%
Pjyamarama completed 89%
Chuckie Egg 395,290 on level 31
Orc Attack 103,496
D Wright, Holywell

Just one day after buying C5 Clive, I completed it getting maximum points
S Brooks, Ashton under Lyme

Starstrike 1,814,000
Ad Astra 52,400, 24m 59s
Atic Atac 25%, 3m 26s
Invasion of Body Snatchas 2,850
Colin Lockhard, Forbes Australia

Gift from the Gods completed
Starstrike 987,100 from L1
Sabre Wulf completed 95%
Spy Hunter 118,765
Booty 65 objects
Ant Attack completed, 22,615
Cyclone 2,050
TLL 9,666
Douglas Ross, Manchester

TLL 3,902
Spy Hunter 462,620
Full Throttle 1st at Silverstone
Hunchback II level 6
Dangermouse in Double Trouble 14,700, saved the world three times
Kung Fu Black Belt, Level 2, 362
Barry Mansfield, Sidcup

3D Starstrike 1,043,200 on easy
Spy Hunter 70,655 on expert
Bruce Lee 302,300
Pyjamarama 56%
Jet Set Willy completed, with unlimited lives poke (!)
Andrew Wright, Portsmouth

Raid Over Moscow completed, 137,000
Pyjamarama completed, 88%
Herbert's Dummy Run completed 30/5/85, 92 jelly babies I finished after 4 hours — it was a cinch
Full Throttle 1st at Silverstone
Hunchback II Level 5
Match Day beaten on all levels
Atic Atac completed
Janne Jarvis

Bruce Lee 279,300, completed 5 times
River Raid 51,520
Jet Pac 101,430
Darrell Edon

Brian Jacks Superstars 1353 on level five
Beach Head 121,300 completed
World Cup completed 15 times
Kokotoni Wilf completed
Ant Attack 7 people rescued
Mark Leonard, Ely, Cambs

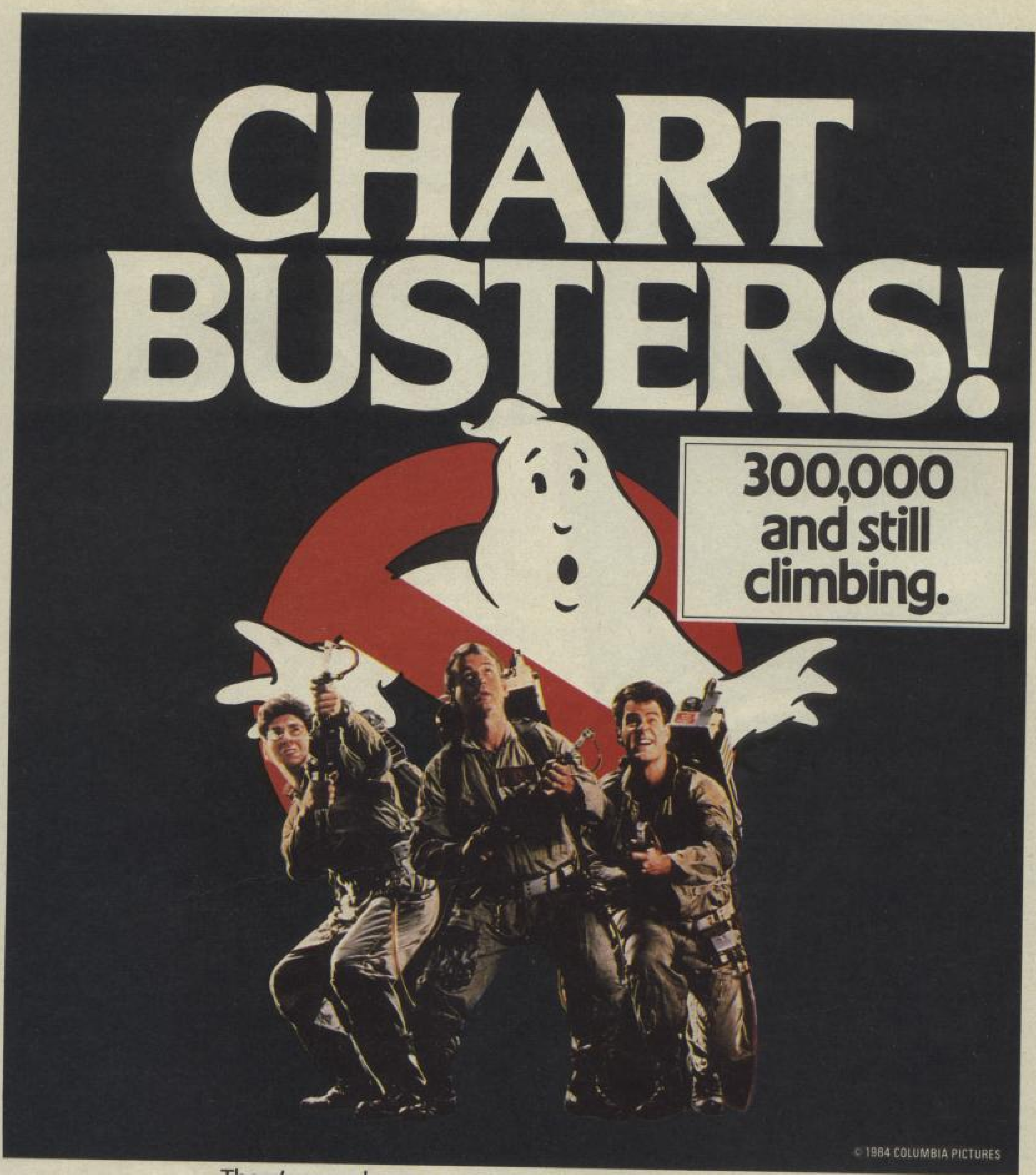
LLOYD MANGRAM'S HALL OF SLIME



Sabre Wulf completed
Automania 4 cars built
Trashman Grove Street
Androids 4sheets
Match Day 4-2 in final
S Blewett, Hayle, Cornwall

Supermutt 100%
Mad Martha finished
Zig Zag 19,074
Pyramid 75,000 approx
Starstrike 800,000 approx
Philip Doyle, Hornsey, London

Bruce Lee 1,329,700
Starstrike 593,100
Beach Head 69,800
Booty 66 pieces of booty
Brian Bloodaxe 18,400
Mr Wimpy 28,870
Mutant Monty 24,482
Andrew Upton, Birkenhead



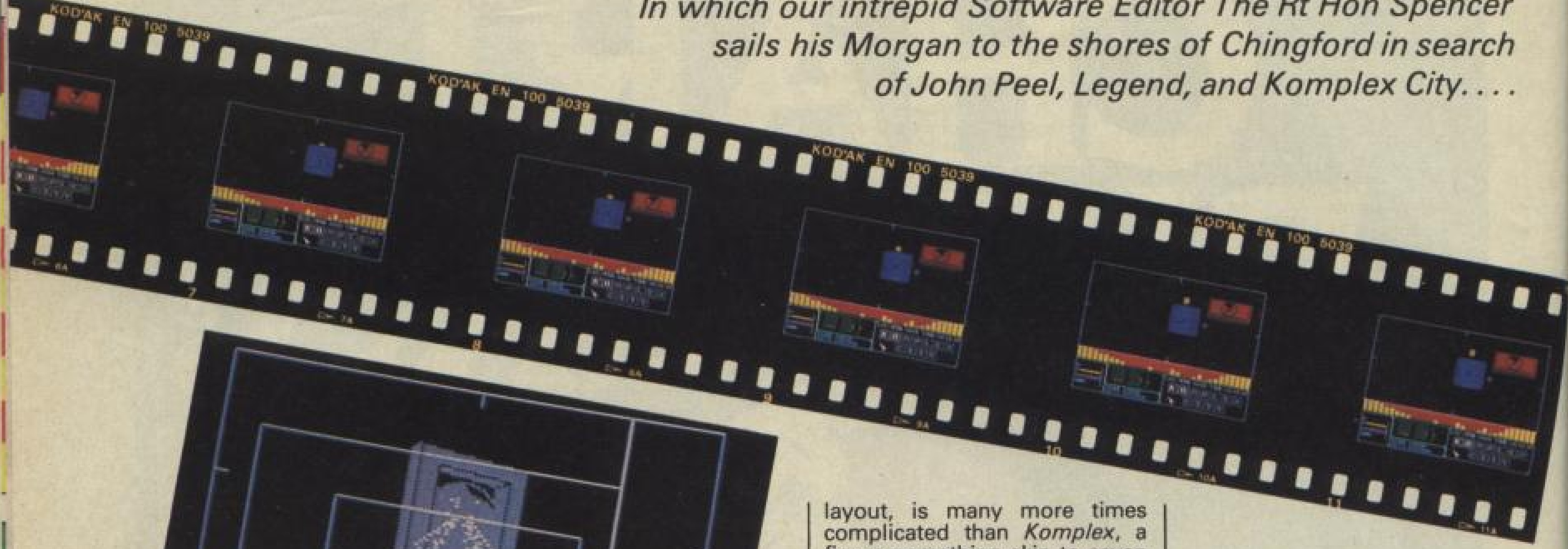
There's never been a computer game like Ghostbusters.
It's broken all records, not just in the UK but around the world.
If you don't have yours already, don't panic.
Just get on down to your local software store.
Ghostbusters is there, ready and waiting.
Available on Commodore 64 cassette and disk, Sinclair Spectrum, MSX, Amstrad and AHC Disk.

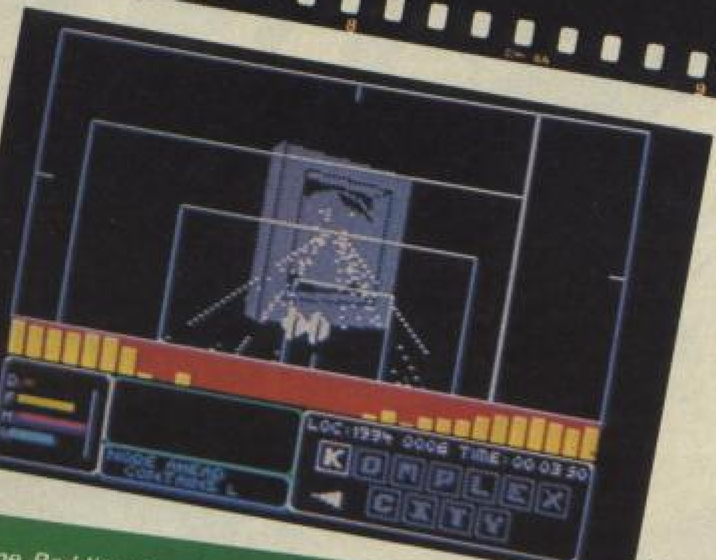
ACTIVISION
HOME COMPUTER SOFTWARE™

AVAILABLE FROM SELECTED BRANCHES OF BOOTS, WH SMITH, JOHN MENZIES, LASKY'S, SPECTRUM, RUMBELOWS, WOOLWORTH AND GOOD COMPUTER SOFTWARE STORES EVERYWHERE.

THE STUFF OF LEGENDS?

In which our intrepid Software Editor The Rt Hon Spencer sails his Morgan to the shores of Chingford in search of John Peel, Legend, and Komplex City. . . .





One Baddie who will never make it to Chingford

AS I WEAVE through the pothole ridden streets of North East London I note, a little cynically perhaps, that it seems strange that **Legend** have a London phone number and yet, are not actually in the London A to Z. It sums them up rather well. I don't care what you say John, Chingford is not in my 'A-Z', (and for the record it's not in the 'ABC' either). So begins the first argument of the day. Having spent the greater part of the morning touring the outskirts of The Smoke — in a hot and dusty Morgan accompanied by an equally hot, and very nearly as dusty dog — I am miffed to be told on eventual arrival that if Legend isn't on the map then the map is wrong.

Legend have acquired a reputation for hype, not in itself a Bad Thing, as long as the product hyped is up to it. *The Great Space Race* is game that damned them most of all. John believes that Legend was unfortunate to have made some very bad mistakes. Just at the time when the public were waking to the reality of the Imagine fiasco, Legend was branded with the same iron. Producing a camera, he admits to mismanagement of the Space Race project, and points to the hazards of a disloyal programming team. Two elements that made *The Great Space Race* such a flop. Whatever you believe about that era, there remains one truth — Imagine have gone but Legend are still, very much, in the game. John Peel starts photographing me.

The invitation to spend the day trying to find Chingford came about because Legend had something very important which they wanted to share, with us, and the rest of the world. *Komplex City* was nearing completion. I decide I want to go home. I have to admit I wasn't one of the thousands who, John assures me, raved over *Komplex*. I could wonder at the technical excellence of the graphics and even find myself inspired by the size and complexity of the thing, but the truth was I was bored, nothing really seemed to happen. *'Komplex* is the ultimate mapping game' says John as he takes yet another photograph of the dog — the only one not irritated by this constant image stealing — even John's charming wife, Jan (the Boss) wants to know how anyone can avoid thumping him? *'Komplex* is only the beginning', he assures me, in between snapping the dog. The beginning of what John?

It seems that *Komplex* is the first part of a trilogy. Part one was the 'Ultimate mapping game'. The second part, *Komplex City*, is to be one of the most exciting and graphically perfect arcade games available. The second game is still based around a map, but this time the computer takes care of the directional side of life leaving you to find the letters and shoot the baddies. Part 2, in terms of layout, is many more times complicated than *Komplex*, a figure something akin to seven with 16 zeros was bandied about, but that's not important. If that is the number of maze variations you won't live long enough to verify the claim anyway.

Three and a half hours after the discovery of Chingford and I haven't seen a thing yet. I still want to go home. How about it? We argue again. How about a peek through the crack in the wall John? We argue. More very well rotted grape juice slides down throats and in the end he decides to compromise. He'll take the dog for a look and, if things are going well and the dog is impressed, perhaps I can have a look.

John gone, I turn to Jan and we chat, discussing just about everything — except this game and the successor to *Valhalla*. She is keeping very mum on that one.

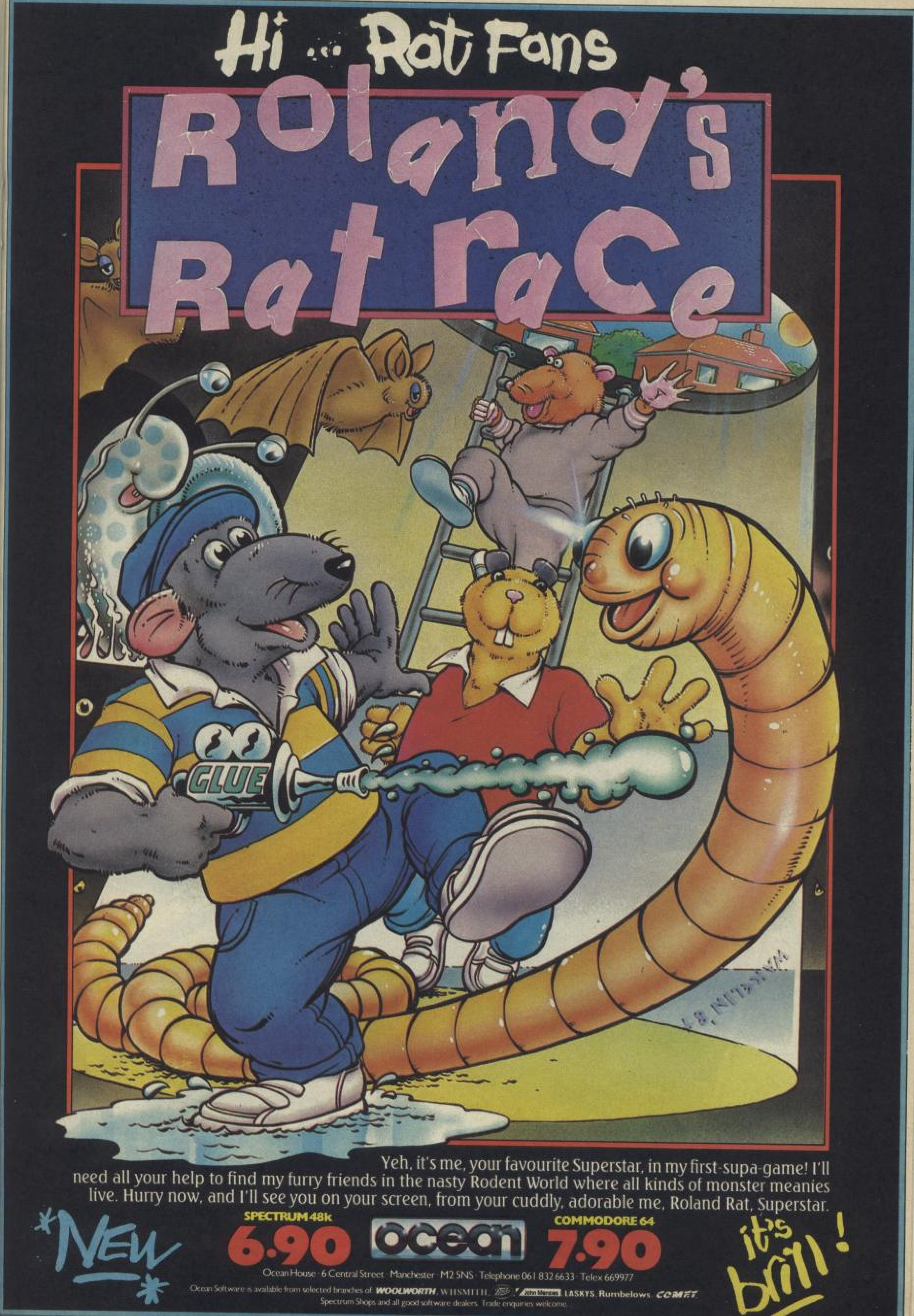
John returns and explains that the demonstration is just about ready, soon, Peel willing, I will have a chance to see what all the other software houses said could not be done . . . real time animated 3D full colour graphics without attribute clash. It is Chingford Discovery, T plus Four and a Quarter, and I am getting close. While I wait, trying to ignore John's insults, I quietly ponder the idea of a world without attribute problems . . . imagine, *Everyones a Wally* without all of those funny flashing squares — sounds very tempting, but can this chap do it?

At Chingford Discovery T plus Five I wonder if I will see anything. Suddenly the phone rings. John, surprised, drops his camera and takes a photo of his foot. Jan picks up the receiver, she listens intently. And calmly announces that Colin has got a cold but he's as ready as he'll ever be. Panic, did she mean that Colin has got cold feet and doesn't want to show me the graphics? Perhaps he's lost his voice because of a cold and won't be able to explain anything and then I . . . Aaargh . . . the dog's licking my leg.

Wonders will never cease, here I am at last — ages after finding Chingford — at the heart of Legend. John shows me the main body of the new game. The graphics are every inch *Komplex* except this time the player has a view flying down tunnels, switching from this to that. There are doors which can be docked with (automatically for those who didn't work it out last time) and enemy objects that must be shot and destroyed. Fly badly and you bang and scrape down a tunnel wall — this alerts more and yet nastier foe to your presence. The screen displays information about shield strength, your location, location of targets — it all looks very busy indeed.

John explains that there is a faster way of getting from one location to another: hyperspace. He leads me to another Spectrum still being fed with fresh hot code, via an umbilical cord trailing from a BBC. Fed with bytes, the Spectrum screen bursts into life. 'That's what hyperspace will have, only more and better'. Different coloured objects, some box shaped others cylindrical, iris in and out while they rotate in 3D. They pass in front of or behind each other with no flicker and not a single attribute clash. John looks as if he has discovered the philosopher's stone. It may not be the stuff that legends are made from but it should certainly put them on the map. Find out next month if I was had or not.

(NOTE: CRASH would like to apologise to those readers who may live in Chingford for it's absence from our reference works. The art department would like to correct the situation and would appreciate your help: Write to 'I know where Chingford is', CRASH Micro, PO Box 10, Ludlow, Shropshire, SY8 1DB.)

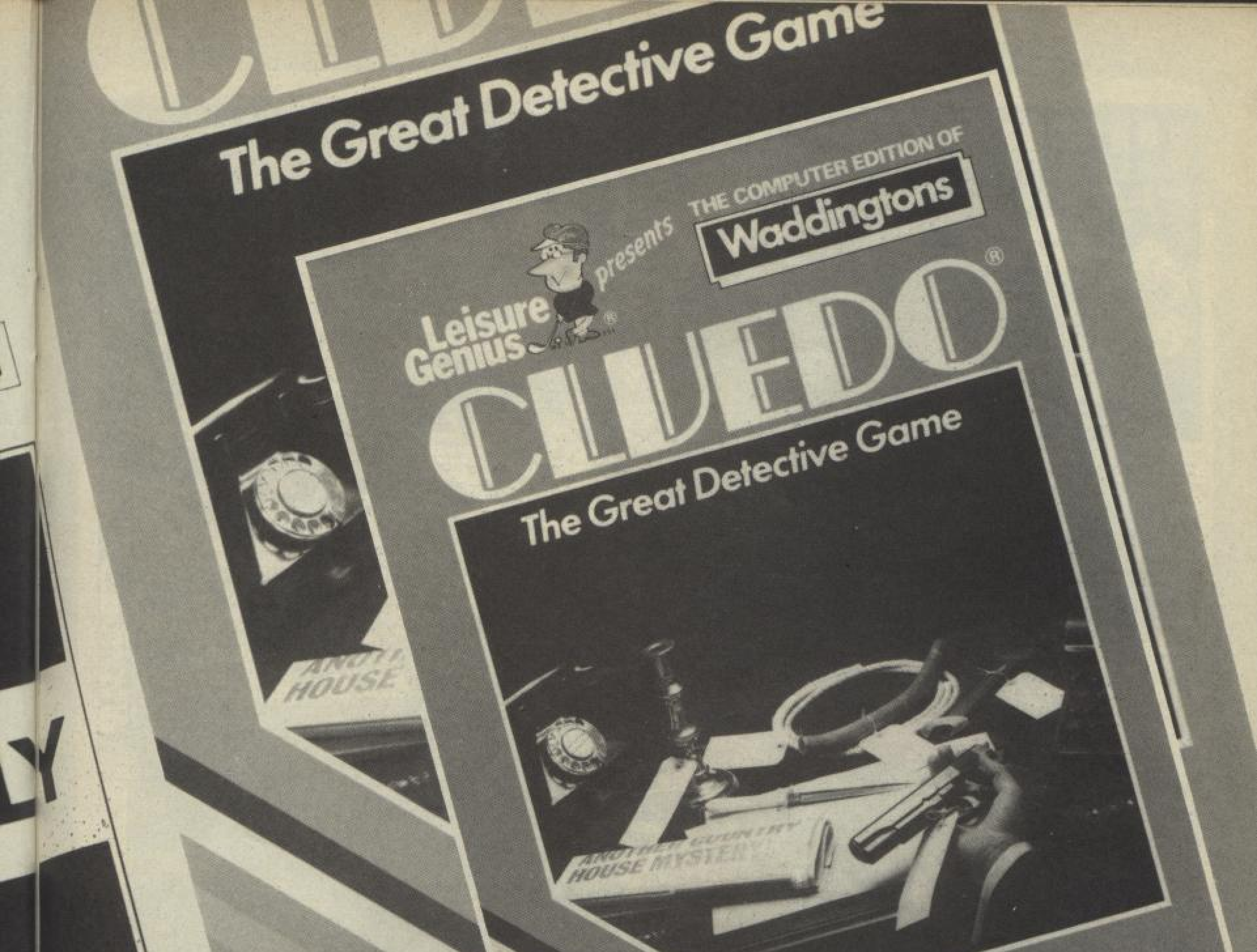


HAVEN'T GOT A CLUEDO? YOU COULD MONOPOLISE THIS COMPETITION

Crash Competition

The dashing, witty, urbane CRASH Software Editor has been refusing to go home at night for the past few days. The fellow is ruining his aristocratic looks by staying up all night, playing games on the office Spectrum.





The official version of *Monopoly*, produced by **Leisure Genius**, has caused him a couple of sleepless nights already — the poor fellow's totally addicted to playing the game. Muttering darkly about family Christmases spent grouped around a roaring log fire in the Baronial Hall keep passing his lips, as he keeps passing GO. The poor chap's totally addicted!

But worse is yet to come. Jem is a *Cluedo* freak too . . . and we haven't dared tell him that Leisure Genius have also produced the official version of that board game too. I thought it best to hide it, and let him have a look at *Cluedo* on the Spectrum in time for next issue. . . .

Anyway, if you think you should run the risk of sleepless nights, we've arranged a little competitionipoos for you delectation and amusement. Leisure Genius are going to give away twenty five copies of *Monopoly* and twenty five copies of *Cluedo* in what is really two competitions. If you want to have a go for the *Monopoly* game, jot a note of how old the board game is this year on the back of a postcard and send it to the MONOPOLY COMP, PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB. If you want to have a chance of winning a copy of *Cluedo* for the Spectrum, write down the names of two of the characters which appear in the board game, only send that slip of paper to CLUEDO COMP, PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB.

There's nothing stopping you entering both competitionlets, so long as each entry is on a separate piece of paper which carries your name and address and make sure your entries arrive in the office by judging day, which takes place on 29th August.

Best of luck!

Mind you, I think I might just let old Software Ed have *Cluedo* now . . . the less often he goes home, the less dirty his Morgan gets and the less car washing this minion has to do. Hmmm, now where did I hide it. . . .



ULTIMATE
PLAY THE GAME
PRESENT
JETMAN
OUR HERO, HAVING PLUCKED THE EYE OF OKTUP OFF OKTUP AND FRIGHTENED OFF THE HOOLIGAN ALIENS, HAS JUST HAD SAME EYE PLUCKED FROM HIS GRASP BY THE DIM-WITTED UMPARP BIRD! UNDAUNTED, OUR HERO PLANS TO RECOVER THE FABULOUS EYE!
HAH! I SHALL QUICKLY FASHION A SPEAR AND PURSUE THE UPSTART UMPARP!
S'CUSE ME...
THEN I SHALL QUICKLY FASHION A SADDLE FOR MY MONSTEROUS STEED SO THAT I MAY PURSUE THE UMPARP TO IT'S VERY NEST...
S'CUSE ME...
BUT I KNOW WHERE THE UMPARP NESTS...
IT NESTS IN THE...
UMPARP!
PARP!
UMPARP!
...ASTEROID BELT!
THE ASTEROID BELT? BUT THAT'S IN OUTER SPACE AN' WE HAVEN'T GOT A SPACE SHIP!
SHAME!
SNIGGER!
HOOT!
HEE-HEE
LAFF
MOO-HAHA
CHORT
HMM! I MUST REGAIN THE FABULOUS EYE OF OKTUP SO I SHALL QUICKLY FASHION A SPACE SHIP AND PURSUE THE UPSTART UMPARP BIRD!
WHA..?
FIRST I MUST GATHER LOTS OF THESE HANGING VINES...
A STRING SPACESHIP???
...WHICH I QUICKLY FASHION INTO A NET, WHICH I QUICKLY TIE TO SOME ROCKS, WHICH I QUICKLY LOAD ONTO THESE TIED-BACK TREES, THEN I QUICKLY...
CALL OUT THE MAGIC WORD...
OH, A KNITTED SPACESHIP...
UMPARP
KLADDY NORA...
BY HECK...
...THE MATING CALL OF THE THIEVING UMPARP BIRD!
OH...
I THINK I BEGIN TO SEE THE LOGIC...
PAA...
UMPAA
UMPAA...
UMPAA-PAA...
PARP
DOM
UMPARP
UMPARP
POOP
POO PAR
PARP
PIP
NOW I SLASH THE TRIGGER-ROPE WITH MY TRUSTY SPEAR...
WOW!
TWANNNG
I HOPE I GOT THIS WRONG...
BLOM
NOW I TIE MY CAPTURED UMPARPS TO MY TRULY MONSTEROUS STEED...
UMPARP?
...KNEW IT!
AN' NOW I START THE RUMOUR...
...THE RUMOUR ABOUT THE BIG OMLETTE IN THE ASTEROID BELT!
OMLETTE!
OMLETTE?
EH?
EH?
OMLETTE?
OMLETTE?
OMLETTE?
AND OFF WE GO TO THE ASTEROID BELT TO RECOVER MY EYE!
FWIP
CHOKE!
CHOKE!
HE DONE IT! HE'S BACK IN SPACE! HE A HERO AGAIN! HIS MONSTER DON'T LOOK TOO GOOD THOUGH...
NEX' MUNF EH?



THE SINCLAIR STORY part five

From the beginning, the C5 was meant to be a new concept in personal transport. In Sir Clive's own words '. . . as revolutionary in its own terms as calculators in the early '70's or home computers in the early 1980's'. A £400 vehicle which can be driven by anyone over 14 on the roads without a driving licence, road tax, compulsory insurance or helmet, travels around 1,000 miles for the equivalent cost of a gallon of petrol and can be serviced at your own home by a travelling engineer. Sound almost too good to be true?

Produced by Sinclair Vehicles as the first in a range of electric vehicles, the C5 is very much a personal project for Sir Clive. Sadly, it hasn't sold as well as he expected — we take a look at why this might be, and at the C5 itself.

Clive Sinclair's electric vehicle project started nearly twelve years ago, back in 1973 when an in-house team of engineers began looking at the problems of powering vehicles with electricity. Serious design work started in 1981 at Sinclair Research, and in 1983 Sir Clive acquired the project personally from the company. A new company, Sinclair Vehicles Ltd, wholly owned and financed by Sir Clive was set up and moved to Warwick University's Science Park to continue development work on a range of electric vehicles.

When the C5 was launched, in January this year, it was greeted with interest by the media — it was fairly common knowledge that Sir Clive had been working on an electric vehicle, and when it finally arrived journalists flocked to see what the latest piece of innovation from Sir Clive's stables had to offer.

The C5 was launched as the first of a 'family' of electric vehicles which Sinclair Vehicles plans to introduce during the next ten years. Sales of over 100,000 units were forecast for the C5 by its makers, and 2,000 of the electric tricycles had been built and put into stock before the mail-order launch. Production targets of 1,000 C5's a week were set at the Hoover factory in Merthyr Tydfil, and a massive £3 million advertising campaign swung into motion to promote sales.

Within days the C5 trike was being panned by the media. Criticised for being unsafe, unstable, dangerous because it wouldn't be conspicuous to other road users — a deathtrap on three wheels. Very rapidly, Sinclair's first electric vehicle acquired such names as 'the pregnant rollerskate' and 'the electric clog' from journalists eager to write some easy knocking copy.



Pregnant Rollerskate? Electric Clog? Not in the opinion of the Crack reviewing team here at CRASH

Quite rapidly, it became clear that the level of sales forecast would simply not be achieved in the UK market. To date only 8,000 C5's have been sold — less than a fifth of the targetted sales levels — and some months ago production at the factory was cut from 1,000 units a week to 100. 'C5 workers go back to making washing machines' was one told-you-so newspaper headline.

Early in June this year, Sir Clive wrote, in the Mail on Sunday: '. . . before the first customer had taken his C5 onto the road, a vast tidal wave of criticism had surged over my revolutionary new form of transport . . . last week I found myself in the headlines every day — as the misguided creator of a disaster'

The man was clearly unhappy — but what of the critics? Is the C5 unsafe? Well, according to figures compile by the Department of Transport for the first six months of the vehicle's road-going life, there have only been two accidents. Neither accident involved another vehicle, in both cases being caused by 'driver error', and the extent of injuries went no further than 'grazing'.

'The safety criticisms have been made out of context in the main', said a spokesman for Sinclair Vehicles, 'the only safety argument is on the basis of the C5's conspicuity to other road users — and in the context of two wheeled vehicles, specific criticism has only come from two sources. ROSPA thinks the C5 is more safe than bikes and other motorised two wheelers.'

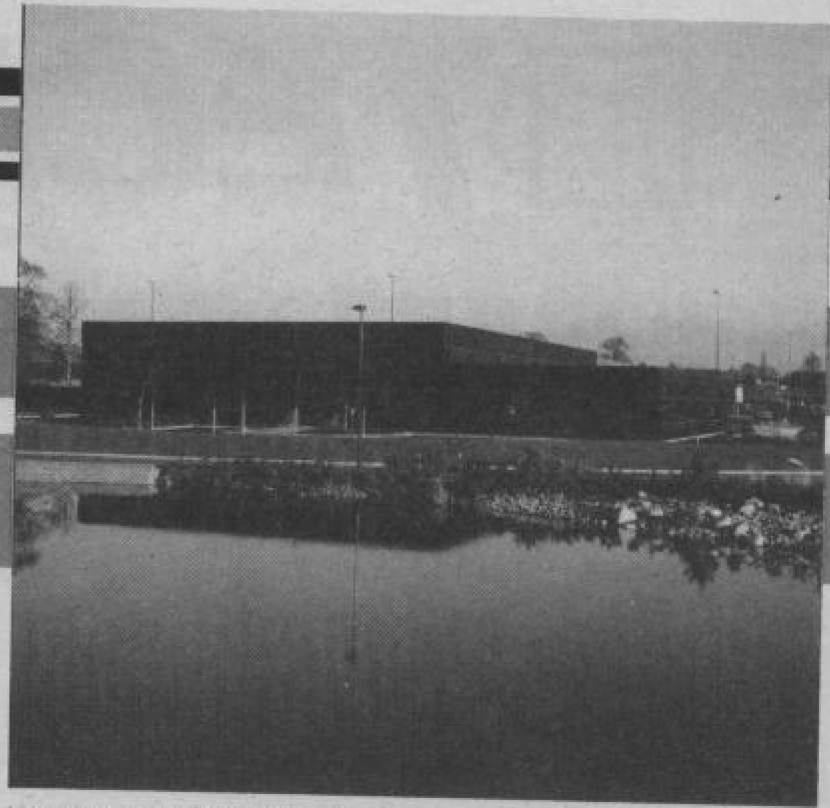
Six thousand C5's are currently held in stock by Sinclair Vehicles, and there are no plans to increase the low production levels in the immediate future. Is the C5 finished? 'We could see sales improve in the UK with the better weather — perhaps a mid-winter launch was not ideal for an open topped vehicle,' commented the spokesman, 'but we see the longer term strength of the C5 lying in overseas sales. We have come up against the inhibitions of the British public, and should do better in countries such as France and Holland where they are already used to the idea of low-powered two wheeled vehicles such as the velocipede.'

Without doubt, the C5 has attracted a vast amount of unflattering press comment. It could be that when people heard that Clive Sinclair was working on electric vehicles they formed a mental picture of a small car, like a Mini, powered from a battery. The reality was bound to be a disappointment, when a one-person motorised tricycle was launched onto a public expecting greater things.

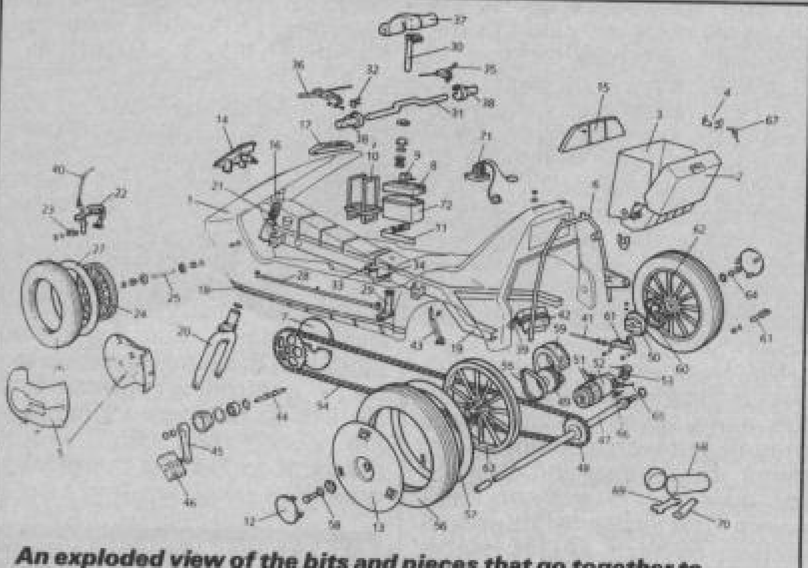
In its own terms, however, it is clearly a revolution in transport — even if there aren't that many people joining in. A whole range of companies with specialist skills were involved in the development and manufacture of C5 components, including Lotus Cars who helped with the development of the steel chassis, the



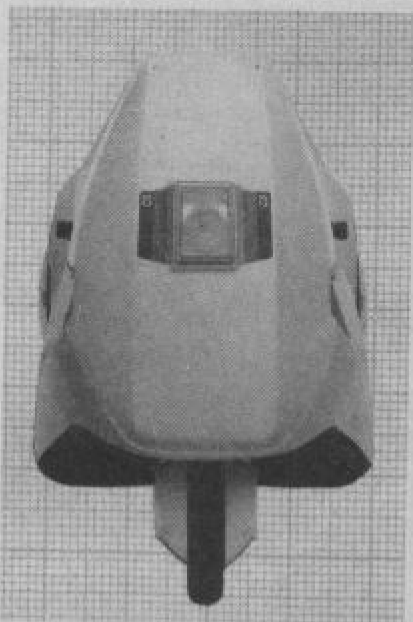
The inside of the C5 factory, part of the Hoover complex at Merthyr Tydfil — a rare picture, brought to you by CRASH!



Warwick University Science Park



An exploded view of the bits and pieces that go together to make a C5. Taken from the Owner's Handbook supplied with the vehicle.



steering geometry and handling and stability.

The battery used to power the C5 is very different to the standard car or lorry battery, which simply couldn't stand up to being repeatedly charged up and discharged and it delivers its power in a different way, being able to cope with prolonged heavy loads. Oldham and Sinclair Vehicles co-operated to produce the power pack used in the C5, a technological development that will no doubt pay dividends on future electric vehicles.

The body mouldings are the largest mass produced polypropylene injection mouldings in the world. The bodyshell is created from two halves using an electrical fusion method — an electric current is passed through conductive sticky tape joining the sections, which heats up and effects a weld.

Motive power is supplied by an electric motor developed by a firm which specialises, amongst other things, in making torpedo motors. Power is delivered through a gearbox incorporating glass reinforced nylon gears which connects directly to the motor's shaft.

All in all, the C5 represents a range of advances in technology assembled together in one innovative package. Other electric vehicle projects, all of which foundered, started with the concept of a traditional car powered by a petrol engine and sought to replace the engine with an electric motor. Sinclair Vehicles started at the other end: having found a motor and battery combination, they then designed the vehicle out from there. And it is only the first in a promised range of electric vehicles — by the early 1990's Sinclair Vehicles plans to introduce an electrically-powered family vehicle.

Having heard so much (most of it uncomplimentary) about the C5, we decided the only fair way to assess the vehicle was to do a mini-review. The ubiquitous Robin Candy of Playing Tips fame, our very own Software Editor and a ZZAP! reviewing minion Gary Penn were dragged to a car park in Ludlow and given a C5 to play with for a while. This is what they found...

● 'Not being a particularly adventurous type, it was not my life's ambition to drive a vehicle that a lot of the press described as a death trap. But after much debating and squabbling I found myself being lifted into the plastic interior of a C5 by a rather burly Software Editor. After the initial terror had faded away I started to quite enjoy trundling around the local C5 hire emporium.

'The only problem with controlling it I had was the acceleration button — but that soon became second nature. While I respect the views of sceptics who proclaim the C5 as a death trap, used correctly it is perfectly safe; indeed it is as safe as any other vehicle IF used correctly. In fact after about half an hour's use of a C5 I've changed from laughing at the mere mention of one to actually wanting one.'

Robin Candy

● *'I have always been a bit dubious about the C5 as a form of travel from what I'd seen and heard about it, and I have never really taken it seriously. It doesn't exactly look and feel that stable or roadworthy. Due to their width they are annoying to overtake on the road.*

'My opinion has changed somewhat though, after actually zipping around in one for while. I must confess to feeling adequately secure as I drove about (if driving a C5 is the correct term) and I was impressed with the reasonable speed that is attainable (even through pedalling). I still feel that the whole thing is rather poor in actual construction, though not in design as the ride was a comfortable and enjoyable one. The price seems fair for what it has to offer but I think it would benefit from being slightly cheaper (if that is in fact possible).'

Gary Penn

● 'What a fantastic surprise! The C5 was a great deal more comfortable than I had imagined it to be, and a good deal quicker. I would have welcomed the chance to have given it a full road test but I think four CRASH-odians dropping in on the poor chap at Temeside was quite enough, without our disappearing over the horizon in his buggy.

'Apart from the comfortable driving position I am pleased to be able to report that the pedal power is easy to use — the driver can exert a lot more force than on an ordinary bike. My only dislikes where the LED warning lights which I found hard to see. There was a lot of creaking from the chassis which was a little unsettling. On the whole I think that it has the potential for being more than just a fun car. I would be more than happy to make my daily 5 mile journey into Ludlow in one. I want one!'

Jeremy Spencer

We've not finished yet! The Sinclair story continues next month with . . . well, you'll just have to wait and see.

TECH NICHE

TIMELY TIMEX

While confusion reigns as to whether Sinclair Research is or is not developing a replacement or upgrade with or without 128K of RAM (WHO said that . . .) CRASH has received at its offices a machine which at first sight appears to be the much aligned TIMEX 2068 from the United States. On closer inspection however, and with an astute reviewer pointing a joystick-battered finger in the right direction, the small PAL logo was discovered hiding in full PAL-colour on the front of the machine leaving no doubt that this was a European version of the same said brute (Nice one Mr. Holmes). In fact, it was later discovered that TIMEX of Portugal was the perpetrator of this crime (Who on earth would send CRASH a computer to review)? In their defence it must be said that they were only trying to promote their baby (a bastard by inception and certainly on closer inspection) with the hope of creating some interest here in the UK (wake up you boys and girls)! A thought crossed our minds here at Ludlow (the lights dimmed in the offices for a couple of seconds) whether this could possibly be the replacement/upgrade for existing and future Spectrum users?

ON THE FACE OF IT

The good looks of the machine certainly provoked a lot of appreciative grunts from Spectrum addicts. The computer squats on the table trying to cheat its own shadow and looks like some jumbo family-pack portable calculator in a neat silver metallic costume. The keyboard layout is an exact copy of the rubber-gumption Spectrum sloshboard, but sports some extra useful items such as a full length space bar and a complementary caps shift key on the righthand side. The annotation is only in mono (What happened to PAL colour?), but differentiating between the four key-modes is in fact easier than on the Spectrum due to the inverted logos for the symbol shift operations. The key-action is a lot more crisp and sharp and is a space leap for Spectrumkind, although it's still light-years away from the full-sized, full travel keyboard standard.

To the right of the keyboard a large flap uncovers the TIMEX COMMAND CARTRIDGE 'dock' which will accept TIMEX specific ROM/RAM modules complete with carrying handles. These are sideways ROM/RAMS using the ingenious bank switching technique (more of this later . . .) and can be the carriers of auto-starting commercial programs (games, utilities etc) or special languages or operating systems. To the lefthand side of the unit is located a power toggle switch (yes, no add-on required!) and further back a nine pin D type plug reveals the existence of an inbuilt joystick port, lo and behold, two joystick ports — the companion plug residing on the opposite side of the computer. Great, no fuss and worry about joystick interfaces, but wait, the software access to the joysticks is anything but standard, requiring access to ports 245 and 246. The trouble is compounded by the fact that the joysticks share these ports with the inbuilt sound generator chip. Before a read of port 246, one of the sound chip registers must be selected which will enable the free input port dedicated to the joystick. This is done by writing the correct value to the sound chip address port 245. Confused, well this means that the joystick ports can only be accessed with machine specific software or by using an extended basic command called STICK, that is if you do your own programming.

At the rear of the unit are a range of input and output ports, the most familiar being the PAL compatible UHF modulated TV output, the 9V power socket and the MIC and EAR sockets for the cassette recorder. A monitor output is provided, which delivers a composite video signal. Unlike the Spectrum, the TIMEX features three extended display modes besides the usual 32 column screen with the character size attribute mode (display mode 1). Display mode 2 provides a 24 x 64 character display (512 x 192 pixels) with one ink and one paper colour. Only fixed paper and ink colour combinations may be selected with bright on and flash disabled. If the character set is redefined by the user, up to 80 characters can be displayed per column and here, obviously, the monitor output is essential.

Display mode 3 displays a secondary screen and attribute page similar to display mode 1, only this time the display file is not at 4000H - 57FFH, but at 6000H - 77FFH and the attribute file not at 5800H - 5AFFH but at 7800H - 7AFFH.

Display mode 4 is the high colour resolution display with the same pixel resolution as mode 1 but with a choice of ink, paper, brightness and flashing for every pixel row of eight pixels. The attribute file is located at 6000H - 7AFFH in this case. As last item there is a 64 pin bus expansion edge connector, which has a different pinout to the Spectrum version and so precludes any ideas of peripheral compatibility.

DEEP INSIDE . . .

Having extended facilities such as joystick ports, sound generator chip and 'dock' memory port, the TIMEX requires a different approach to the system memory configuration. As the Z80 can only access 64K of memory at any given time, the TIMEX people have resorted to the bank switching technique. Up to 4 different banks of 64K can be accessed via the memory bank controller located at ports 252 (DATA) and 253 (ADDR). Memory is selected in 8K chunks and up to eight of these can be selected from the whole bank range as long as they are not located at the same 64K address position.

The Home bank is selected by default and contains the 16K ROM with the Basic Interpreter, routines for in- and output (graphics, keyboard, joysticks, printer, sound chip etc) and 48K of RAM with the Display files, system variables and BASIC program. This is equivalent to the structure of the Spectrum memory. The second bank is the EXROM bank which only contains an 8K ROM with the cassette in — output routines, the bank switching code and the system initialisation routines. The third bank is the DOCK bank, which serves the cartridge programs, and contains either AROS (Application oriented software) or LROS (Language oriented software) or both. The system will detect the presence of these modules and will pass control to these. Bank 4 is the EXPANSION bank. The system will support up to 2 of these (up to 253 of these with a Bus Expansion Unit) and the banks can be used for controlling intelligent devices or for memory expansion. Expanding the TIMEX machine to 128K is therefore a doddle.

SOUNDS RIGHT . . .

As mentioned earlier, TIMEX has provided the machine with a bit more audio power with the help of a 3 channel sound generator chip extra to the normal BEEP output. The General Instrument Ay-3-8912 chip consists of a tone generator for three channels A, B and C, a noise generator and mixers. There is ample control provided for various envelope shapes, amplitude levels (up to 16 levels) and tone and noise generator combination selections either via Basic or via machine code instructions.

EXTENDED BASIC

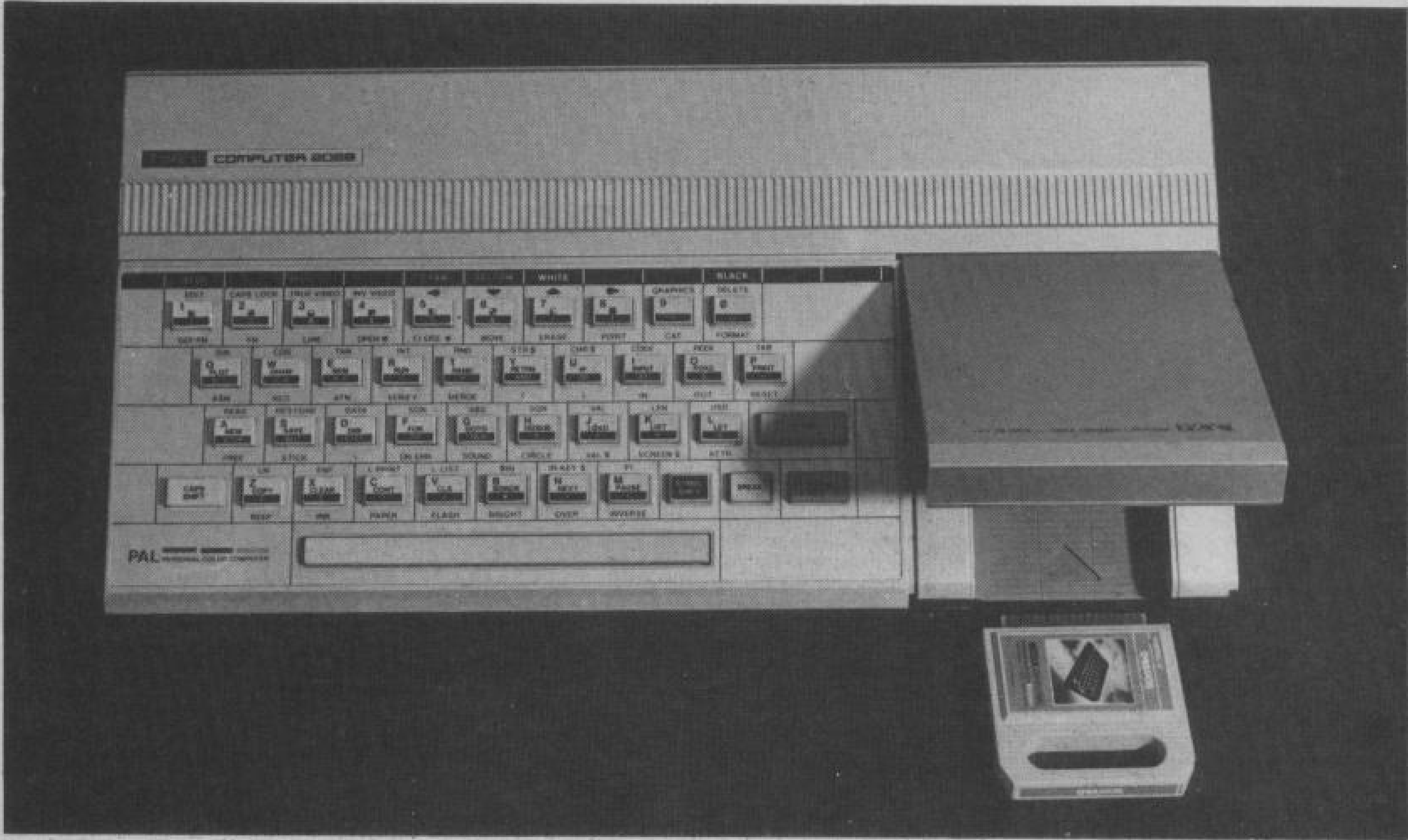
To access all the extra little goodies, several BASIC commands have been implemented.

SOUND reg, value; reg, value; etc.

This command controls the 15 registers of the sound chip and allows the programmer to manhandle the chip in BASIC and create a symphonic background to the graphic activities on the screen.

STICK (device type, player)

The function allows the player to read the status of the two joysticks within BASIC. The value returned can be a combination of several activities and



must therefore be evaluated within ranges.

DELETE m,n

This command allows the deletion of a sequence of lines from a program (lines m to n).

FREE

This function returns the number of bytes of free space currently available in the Home RAM for either programs or variables.

RESET ($c) (*)

This command causes the device associated with the specified stream to be reinitialised. If a channel number is not provided, the system initialises any new devices it finds. The RESET * command does the equivalent of turning the machine off, then on again.

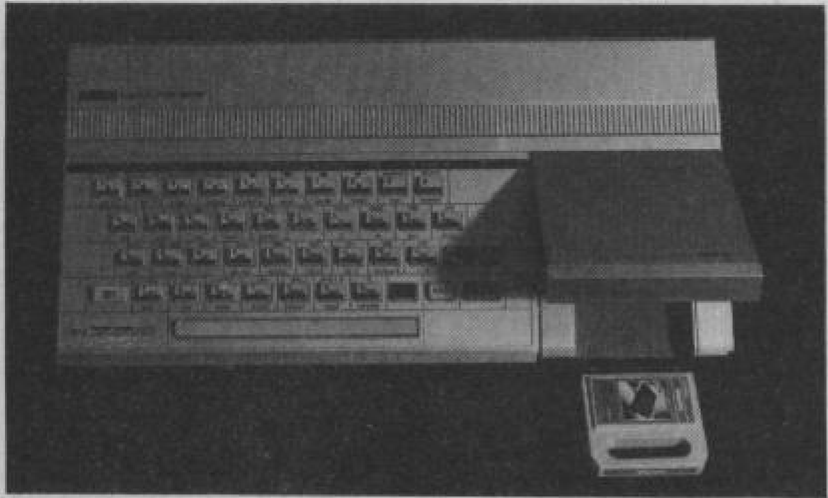
ON ERR GOTO linenumber
ON ERR CON'T
ON ERR RESET

These statements disable the automatic program termination upon encountering an error condition. The ON ERR GOTO linenumber can capture an error with a error routine residing at the specified line and the error number and line location can be peeked at the locations 23739 and 23736. The statement number within the line that caused the error is stored in location 23738. The ON ERR CON'T statement causes the program to resume execution at the statement in which the error originally occurred. If the command is encountered and an error has not occurred, the command is ignored.

A complete set of commands is available for accessing disk or disk-like storage devices which are present on an Expansion Bank. The Home ROM is responsible for passing the command and calling the appropriate routine in the specified Expansion Bus. These include commands such as OPEN, CLOSE, SAVE, LOAD, ERASE, MOVE, VERIFY, PRINT, INPUT and MERGE with microdrive style arguments.

COMPATIBILITY

Few hardware manufacturers will deny that launching a new computer without a large existing software base can cause initial sales delays, especially if the target market is games related. Timex in the States obviously underestimated this point by not ensuring full compatibility with existing Spectrum games. They rejected access to the world's largest games software base and lost the advantage of winning several years of free software development. TIMEX of Portugal realised this and are offering an emulator cartridge to fit into the 'dock' port. Several ROM routines and their start addresses are different on the home bank ROM and machine code programs accessing these routines will encounter several obstacles. So many arcade games program will probably not run in the standard configuration. The emulator replaces the home ROM and provides full compatibility with the Spectrum. Several Spectrum games were tested and performed as normal with the use of the emulator.



VERDICT

The TIMEX computer offers an improved performance when compared to the Spectrum 48K and the Spectrum Plus, but it is about two years too late in appearing. It does not offer enough improvements to warrant users to upgrade to this machine, as there are several very exciting new computers appearing on the market. For new users the machine could prove to be a better machine than the Spectrum, although the changes will only be noticed with specially written software which will make good use of the sound generator chip, the inbuilt joystick ports and the bank switching possibilities. The major question will be what price level the machine will be offered at. At £70 - 80 the TIMEX would be a very good entry level computer, but no official price indications have found their way to the CRASH offices . . .

MIRAGE MICRODRIVER

You may recall that only last month we reviewed a product called *Interface III*, a machine that would stop and transfer any game onto microdrive. We said then that we expected there to be others, but not so soon. Essentially the *Mirage* and Interface III perform the same trickery but the Mirage does seem to be better thought out. In appearance it's another famous Spectrum black box with a little red button on the side. After opening the box we spent some time doing a chip count, there are three, all black and well legged. All in all there isn't much inside, nothing even remotely resembling a hoover, as we had expected.

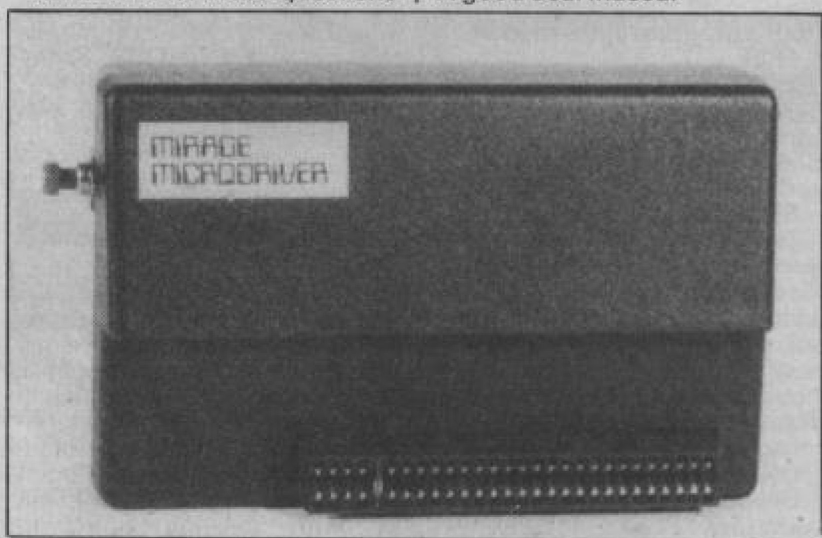
Using the Mirage is a dream. Interface III required the user to make two copies of a game in order to a final copy, only one of those copies could be made onto microdrive. The Mirage is fitted to the Spectrum and stays there while the user loads the game. After the game has loaded simply press the little blip on the side and the game will freeze while at the top of the screen a two line deep blue box appears which sternly offers a copyright warning for itself*(!)* and then invites you to press any key. Now you are presented with five options; **Load, Save, Poke, Run** and **New**. To save the game you have loaded press **S** and Mirage asks you for a filename. After that simply enter the microdrive number and next a touching message appears . . . 'Please wait . . . ' After a long drawn out 30 seconds the microdrive burst/grinds into life. As long as you remembered to format the cartridge and the microdrive is behaving, you are asked if you want to verify the saved game, if you don't trust your drive you ation completed, you can now pocket the saved version of your game. The whole operation is completed in the time it takes to load a game plus a little over a minute.

The Mirage unit can copy a game to tape. Instead of the microdrive number you enter **T**. Tape copy facilities are generally frowned upon and Mirage clearly hope to win friends by designing the system so that games copied with the unit can only be run again if it is still connected to the Spectrum. One very good reason for keeping the unit attached at all times is that all the loading functions are handled by the software within the Mirage. To load a game press the red button and obtain the main menu, press **L** for load, enter the file name and then the drive number and that's it, much easier than using the normal microdrive commands. When a game has loaded from drive, the menu will appear again, to start the game enter **R** for run and off you go. The Poke option allows you to enter, say, an infinite lives poke without having to break into the game. You are prompted for the address and then the data. The poke option makes the creation of cheat games a doddle.

Because the Mirage must be connected at all times, any other equipment has to plug into its through bus, that's simple enough until the little boxes start to argue. More often than not such rare problems can be prevented by changing the order of the devices hung on the Spectrum. On occasions when using the box we noticed the Mirage system 'invades' the current game with its menu but pressing **R** returned everything to normal.

The Mirage definitely outstrips the Interface III in terms of ease of use, flexibility and speed. However Interface III does allow the user to decide whether to save the opening screen or not. By not saving that screen two games can be fitted onto one cartridge whereas Mirage only allows one game per cartridge. The system would have been even better if a format routine could have been built into the list of Mirage options.

This device is a must for the serious microdriver.



Price: £39.95
available via Mail order
Mirage Microcomputers Ltd
24 Bank Street
Braintree,
Essex

MONEY FROM YOUR SOFTWARE

Published by: ESC Publishing, 25 Beaumont Street, Oxford, OX1 2NP
Author: **Anne Staines**
Price: **£6.75 (plus 80p Postage if you buy mail order)**

The days of the backroom software house are not yet over — we seem to get a constant stream of letters and phone calls from people who have just written, or are about to write their mega-game, the ultimate adventure or a super-dooper simulation. 'Can you recommend a software house I could sell it to', 'How do I avoid being ripped off' and 'Should I publish it on my own' are probably the three main questions asked by budding Matthew Smiths and Mike Singletons.

And some of these questions are difficult to answer during a five minute telephone conversation — the commercial world is a jungle at the best of times, and even the most experienced business types can fall foul of the traps and pitfalls that exist. Apart from having a worthwhile product, it's wise to be equipped with a fair understanding of topics such as copyright, marketing, the law of contract, finance and taxation before embarking on the quest for your fortune. Apart from the sharks, there's a whole host of legal requirements, rules and regulations waiting to confuse and confound the entrepreneur.

We have been advising people who've asked us how to go about making money from their programs to get hold of a copy of Anne Staines' book. For £6.95 it's probably one of the most cost-effective investments anyone contemplating selling their software could make. Ms Staines is a barrister — they normally come very expensive — and she has drawn on her professional knowledge and experience to provide a readable introduction to a whole host of topics, including basic details on setting up a limited company, protecting and defending your copyright, contracts, raising finance and marketing. All in one book, which costs about as much as ten minutes with a member of the legal profession, face to face. A good deal indeed.

The Niche takes a first look at Basic Compilers for the Spectrum

MACHINE CODE WITHOUT TEARS

BENCHMARK TESTS - Comparing the compilers

Eight standard BenchMark programs were used in the comparison: timings for the execution of each benchmark program are given in seconds, with the speedup ratios achieved by each of the compilers printed on a grey background.

	BM1	BM2	BM3	BM4	BM5	BM6	BM7	BM8
ZX BASIC	4.9	9.0	21.9	20.7	25.2	62.8	90.0	25.0
MEHMOOD	0x	138x	2.4x	4.9x	6.0x	0x	0x	0x
	*	0.065	9.0	4.2	4.2	*	*	*
SOFTEK FP	2.8x	4.3x	2.5x	2.2x	2.7x	3.2x	3.8x	1.1x
	1.75	2.1	8.7	9.4	9.4	19.7	24.0	22.5
SOFTEK IS	84x	118x	38x	21x	25x	48x	0x	0x
	0.058	0.076	0.57	0.98	0.99	1.32	*	*
MCODER2	113x	93x	35x	23x	27x	54x	61x	0x
	0.043	0.097	0.62	0.90	0.92	1.17	1.47	*
ZIP 1.5	158x	141x	113x	192x	219x	235x	191x	0x
	0.031	0.064	0.194	0.108	0.115	0.29	0.46	*

There's a world of difference between ZX BASIC and machine code. Programs in BASIC tend to be slow, with jerky graphics and poor sound effects. Programs in machine code run hundreds of times faster — which doesn't mean that the graphics just jerk around the screen at Warp Factor Ten. No, machine code programming permits smoother movement, '3D' perspectives, simultaneous sound, animation and so on.

Of course, machine code doesn't necessarily make a game playable, and some classic games have been programmed entirely in BASIC — *Mined Out*, *Football Manager* and *Velnor's Lair* for instance. But if you want to write a shoot-'em-up game, or a program with sophisticated graphics, you'll almost certainly find BASIC too slow.

Back in the olden days of Spectrum programming, when programmers assembled code in their heads, and the back pages of the old orange manual were the first to fall out, there wasn't much alternative to learning machine code once you'd come up against the limitations of BASIC.

Learning machine code was a traumatic process: before disks and microdrives (which brought their own meaning to the term 'random access') every programming mistake meant a crash. Teaching yourself machine code was a frustrating process as, after each mistake, it took several minutes to re-load your assembler, debugger and program source from tape in preparation for another crack at the problem.

Predictably it wasn't long before someone figured out that, if the computer was so fiendishly clever, it really ought to be able to make up machine code for itself. In this article we take a look at currently available BASIC to machine code translators, or 'compilers'. Next month we hope to examine *Colt* and *Blast*, two new and aggressive-sounding BASIC compilers which are under development. In future Niches we'll blow the dust off other Spectrum languages such as Logo, Forth, C, and Pascal.

Meanwhile, back at the keyboard....

WHY IS BASIC SO SLOW?

BASIC is slow because everything you type is carefully checked to make sure it is correct. This would be fair enough if it only happened once, when the program was entered, but the exhaustive checking continues even while a program is running.

If you write a program in BASIC to add 2 and 2 a hundred times, the computer will take as long to work out the answer the last time as it did the first 99 times. The actual adding is done fairly quickly in machine code (which is the only language the Spectrum's Z80 processor can really understand), but the overall effect is still very slow. This is partly because BASIC checks the syntax of lines over and over again, even after they have been entered (in case some stray POKE or Cosmic Ray has changed the contents of program memory?)

BASIC is also hampered by the need to cope with all sorts of special cases. The routine to add numbers in the Spectrum ROM has to be able to cope with functions, arrays, numbers and variables; these can have almost any value from minus several zillion upwards. The Z80 processor can only cope with a few digits at a time; it has to do all its arithmetic in several steps, just in case. Worse still, it can't multiply and divide at all, so these operations must be performed 'longhand'.

Much of the code in the Spectrum's ROM is taken from the earlier ZX81 BASIC, which was squashed into just 8K. In order to keep the size down, parts of ZX BASIC were written using a leisurely version of the compact Forth language, rather than machine code. A new ROM for the Spectrum is planned (though not by Sinclair), but nothing has materialised yet.

One of the nice features of Spectrum BASIC is the way that it lets you type in new lines of program and scrub out old ones as you test your program. This is hell for the BASIC system, which has to keep scrabbling around in tables to keep track of shifting variables and program lines. The longer your BASIC program, the worse this gets, so that a 20K program may run at half the speed of a 2K one. In compiled BASIC, however, the position of every line and variable is fixed. This makes programs fast, but means that you have to re-compile the whole lot if you changed one line.

Finally, ZX BASIC is cursed by the stupid way humans like to write things. We write 'X = 6 + 7' when the computer would be much happier with '6 + 7 = X'. It can't do anything with the name X till it finds the equals sign (meaning that a value must be stored). Similarly, the equals sign isn't really relevant till the computer knows **what** is to be stored. The plus sign means add two values — there's no point telling the computer about it until it has found both the numbers. ZX BASIC actually performs calculations in the second sequence (which is called Reverse polish Notation), but it has to re-order them from the first sequence every time it finds them, and that is a slow process.

WHAT'S A COMPILER

The Spectrum BASIC compilers are programs which read a BASIC program and produce a machine code equivalent. The compiler and both programs have to be in memory all at once, which limits the size of compiled programs to 10-20K.

Compiled code may be anything from 2 to 200 times faster than the original, depending upon the compiler you are using and the intricacy of the original program. We ran (or at least, tried to run!) the standard BASIC benchmark programs on each of the compilers. The results are shown in the Timing Table, along with the published timings for ZX BASIC.

The timings are not as fast as for pure machine code, which allows much more freedom to the programmer, but they are easily fast enough for most games programming. A number of commercial games are written in compiled BASIC (including *Frank 'N' Stein*, published by PSS) and look none the worse for it, although you'd be hard-put to write *Knight Lore* with a compiler.

A few of the positions in the table contain asterisks, because the test program could not be processed by that compiler. In order to keep compiled programs fast, and reduce the complexity of the compiler, the packages all impose restrictions on what they can compile.

COMPILER CONSTRAINTS

Softek's *FP* compiler is the only one that can cope with decimal values, for instance — this makes it much slower than the others, but means that it is the only compiler suitable for use in business programming. But who wants to run as business on a Spectrum anyway? The other compilers restrict you to whole numbers between -32767 and 32767, although you can use values up to 65535 in POKEs and suchlike.

You can switch back and forth from normal BASIC, machine code and compiled code with USR calls and RETURN instructions, so it is possible to write programs in a mixture of languages if you need speed at one point and sophistication elsewhere.

The Softek compilers (*FP* and *IS*) are the only ones which allow you to use full BASIC string-handling; *Mcoder* gives you a fairly complete set of facilities to work with short strings (up to 255 characters) but *Zip* and the *Mehmood* compiler can only offer simple routines to read and write characters. You could probably write a text adventure using *Mcoder* or one of the Softek compilers, but you'd be much better off using *The Quill*.

Array handling is similarly

limited — none of the compilers allow arrays of more than one dimension,and the *IS* and *Mehmood* programs won't allow arrays at all. you can use long variable names with *Mcoder* and the Softek compilers, but the cheaper packages restrict you to 52 short variable names.

The 'core' of ZX BASIC commands — PRINT, INPUT, PLOT, DRAW, LET, GO SUB, IF, and so on — are allowed by all the compilers. The *Mehmood* compiler doesn't allow FOR loops, which meant that we couldn't run some of the benchmark programs.

One of the snags of real machine code is the fact that you can't 'break in' to programs. This suits software houses, who want to discourage piracy, but it is very inconvenient for programmers. The only way you can stop a machine code program is to pull out the plug and re-load it. *Zip* and *Mcoder* allow you to break into compiled programs at will, but the Softek compilers require a special command wherever you might wish to break into compiled programs. You can't break into programs produced by the *Mehmood* compiler at all.

The Softek compilers allow you to put special instructions in REM statements. These instructions only work once a program has been compiled, which is inconvenient since you can't test such programs fully in normal BASIC — one of the big advantages of BASIC compilers over machine code is the fact that you can test your programs interactively, with all the BASIC checks and hand-holding to help you, before you compile them.

Softek's special instructions allow you to check for the Break key, enter machine code into the program, and move simple (character-sized) sprites smoothly around the screen. On the *FP* compiler you can also trap errors and simulate the ON . . . GO TO statement. None of the compilers let you GO TO a calculated line number — you must always GO TO a specific number.

Mcoder offers some REM instructions, but these are designed for program testing. You can turn off BREAK checks, giving marginally faster code, or turn on a 'trace' facility which shows the current line as it is executed. *Mcoder* and *Zip* allow you to pass variable values back and forth between BASIC and machine code.

THE COMPILERS COMPARED

So far we've taken a broad overview, looking at the compilers together. In the following section we look closely at each of the five Spectrum compilers (there were six, but the first Spectrum BASIC compiler, SUPER C is no longer available).

IS COMPILER
£9.95
Softek, 12/13 Henrietta Street, Covent Garden, London

This program is very like the *FP* one in presentation — it shares the same instruction sheet — but it restricts itself to arithmetic using whole numbers (*IS* stands for Integer and String, whereas *FP* stood for Floating Point). This restrictions makes *IS* about ten times faster than its stablemate. Again, compilation is fast and you can compile several programs into different areas of memory.

The compiled code is slower than that generated by *Mcoder*, and quite a lot slower than *Zip*, but the *IS* compiler has the bonus of support for very simple sprites. The lack of array-handling is annoying, although not too hard to get around if you're prepared to use PEEK and POKE or string-slicing instead.

ZIP 1.5
£5.50
ZIP COMPILER OFFER, 120 Greenfield Road, Harborne, Birmingham

This is yet another refugee from a computer magazine — an early version of *Zip* was listed (in the wrong order, mainly) by the troubleshooting goblins at Your Spectrum last year (issues 3-6). *Zip* is mainly written in BASIC and consequently works more slowly than *Mcoder* or *IS*, although it's not as lethargic as the Popular Computing weekly offering. Line numbers above 5000 are used by the compiler and optimiser.
Zip *produces faster code than the other compilers, as the benchmark timings show. Like IS* and *Mcoder* it works with whole numbers only — unlike them, it doesn't allow strings or DATA and variable names are restricted.

The documentation is better than for the other compilers, consisting of twelve pages of A5 (reduced from the A4 originals), with appendices covering benchmark performance, useful subroutines and error messages. There is also a section on customising the compiler program. A demonstration game is recorded after the compiler.

As compilation takes place your program is listed on the screen, and errors are shown in context. *Zip* is the only compiler which detects all the errors in a program at once — this is just as well, in view of the compilation rate. Zip produces error messages in plain English, whereas the other compilers just stop at the location of the error.

MCODER
£8.95
PSS, 452 Stoney Stanton Road, Coventry

Mcoder has the longest history of all the Spectrum compilers. It began life in the July 1983 issue of Your Computer magazine; in those days it was a 2K program for the ZX81 called *ZX-GT*. Like the Softek compilers, *Mcoder* now occupies about 6K.

The *Mcoder* documentation is unimpressive: seven cassette-sized pages, in the form of a brief question and answer session and a list of commands allowed by the compiler. PSS offer a three page 'help sheet' to users who miss the significance of some of the comments in the cassette insert. The code produced is faster than that from the *IS* compiler, especially when it comes to string handling.

Mcoder looks very much like the Softek compilers (or should that be the other way around?) and performs in a similar way, with the same fast compilation and simple error indication. *Mcoder* and *IS* are very similar — *Mcoder* handles numeric arrays and has better debugging facilities, while *IS* is slightly more compatible with normal BASIC and offers simple sprites.

COMPILER
£2.75
A Mehmood, 30 Webber House, North Street, Barking, Essex

This compiler was featured in a trio of Popular Computing Weekly articles in April this year. It doesn't come with any instructions, so you'll need a copy of PopCW Volume 4 No 17, and ideally the two following issues as well. A simple demonstration game is supplied on the other side of the tape.

Compiler is written in BASIC, so it works very slowly, and line numbers below 1000 are reserved for the compiler program. As soon as an error is found a message is printed and compilation stops. The messages are usually quite helpful, but the stop is annoying since you have to start again to find the next error, and this might involve a wait of several minutes.
At £2.75 this is not a bad low-cost compiler, and would probably be useful for 'spicing up' BASIC program. It is a shame that it doesn't allow FOR . . . NEXT loops or even PRINTing of strings. The poor timings it achieves on the Benchmarks result from the fact that the Spectrum's very slow, built-in 'division' routine is used.

FP COMPILER
£19.95
Softek, 12/13 Henrietta Street, Covent Garden, London

This is the most expensive compiler by a clear tenner, so it had better be good — or at least different! As the benchmark timings show, it produces fairly pedestrian code, typically 2-10 times faster than normal BASIC — but it is very flexible. You can use *FP* to speed up almost any ZX BASIC program that doesn't use arrays of more than one dimension, or the VAL and VALPP functions. The compiler also disallows calculations in DATA and GO TOs, but we wouldn't dream of using those, would we?

The documentation is barely adequate — a single large sheet of paper with an introduction, list of compiled statements and brief technical discussion.

The *FP* compiler displays the current line being processed as it works. When an error is found the compiler stops and shows the line containing the problem, with a question-mark to show where the problem was found. You can't go on to detect subsequent errors, but this doesn't matter much since the compiler is very fast. You can compile several programs into different areas of memory by using CLEAR between one compilation and the next.

FP is a well-written program, but it is expensive and may not be useful to many Spectrum users, since it doesn't offer a dramatic speed increase over well-written BASIC. We'll look at it again next month, when we examine BLAST, a new compiler also designed to process 'off the shelf' programs.

None of these compilers really offer 'instant translation' for your BASIC. With the possible exception of Softek's *FP* you really have to write your program with compilation in mind — it is hard work to convert existing BASIC to suit any of the compilers. Also, there are some things which are hard to do without the flexibility of real machine code. That said, the packages all produce working code pretty effortlessly, and you can be reasonably confident that compiled programs will work first time — unlike hand-coded ones!

Next month, PR companies willing, we should be able to report on two new compilers — *Colt*, from HiSoft, which is a development of *Mcoder*, and Oxford Computer Systems' *Blast*, which promises to compile absolutely any ZX BASIC program, without alteration. At the moment we're having a bit of trouble wheedling copies out of the manufacturers — they both seem to be holding back until they've had a chance to dismantle their competitor's product! We'll compile more information next Niche. . . .

DOMARK

presents

YOU

as . . .



007

A VIEW TO A KILL
THE COMPUTER GAME

YOU will become
James Bond
in his first arcade/adventure
AVAILABLE NOW on
Spectrum 48K, Commodore 64,
Enterprise
and watch out for
Amstrad, MSX and others

Domark Ltd., 204 Worple Road, London SW20 8PN. Tel: 01-947 5624 Telex: 894475 G

ORDER YOUR COPY NOW!
CALL 01-947 5624/5/6
OFFICE HOURS ONLY

DOMARK

To: Domark Ltd., 204 Worple Road,
London SW20 8PN
Telex: 894475 G

NAME: (BLOCK LETTERS) ....
ADDRESS..
COUNTY..POSTCODE....................
Please send me .... copies of "A View to a Kill – The Computer Game" at £10.99 (includes postage and packing).
I enclose a cheque/P.O. for £..
My computer is: ....
You may order by Access ☐ Visa ☐ American Express ☐ by post or telephone (01-947 5624/5/6). OFFICE HOURS ONLY
Please debit my CREDIT CARD ☐ Signature:....................................
Account No: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
Expiry Date: cm1



Four great new add-ons from Ram, Number One in everything for the Spectrum...

TURBO INTERFACE

Outperforms any other Spectrum interface. Supports Kempston, Protek, Interface 2 and ROM cartridge software, with a full expansion bus at the rear. The Turbo works with two standard joysticks, making the most of the Quickshot II's rapid-fire action. Features a unique built-in power safety device. Amazing value at £22.95.

QUICKSHOT II AUTO RAPID-FIRE JOYSTICK

The top games joystick with its sleek trigger fire button and an auto-fire switch for continuous shooting – a snip at only £9.95.

SPECTRUM INTERFACE

This Kempston-compatible interface adds real games power to your Spectrum. Costs just £9.95.

SPECTRUM UPGRADE KIT

Boost your 16K Spectrum to a full 48K, allowing you to run all the latest and greatest software. Only £21.95

Where can you get your hands on Ram's amazing Spectrum add-ons? You can see them at branches of Boots, Menzies, Greens, Spectrum Group computer centres, and good computer stores everywhere.

Ram Electronics (Fleet) Ltd (Dept CM), 106 Fleet Road, Fleet, Hampshire GU13 8PA.
Credit Card hot line: *02514 25252. (Access & Visa).*

Please send me ____ Spectrum Turbo Interface(s) at £22.95.
____ Quickshot II Joystick(s) at £9.95.
____ Spectrum Interface(s) at £9.95.
____ Spectrum Upgrade Kit(s) at £21.95.
(Please state issue 2 ☐ or 3 ☐)

+£1 per order P+P (£3 Overseas) **TOTAL £**

☐ I enclose cheque/postal order ☐ charge my Access/Visa

Expiry Date___/___/___

Name________________

Address________________

________________Postcode________________

Telephone________________

24 Hour despatch for credit cards and postal orders (7 days for cheques.) All products are fully compatible with the Spectrum, Spectrum + and Sinclair Microdrives.

Ram Electronics (Fleet) Ltd
(Dept *CM*), 106 Fleet Road,
Fleet, Hampshire GU13 8PA.

Trade and Export enquiries welcome.





DEREK BREWSTER'S Adventure Trail

DON'T BLAME ME I'M ONLY THE PROGR. . . .

ONE GOOD RULE in life is 'never boast about anything until you have seen it through'. And the other pearl of wisdom you tend to hear is 'things are always more difficult than they look'.

Taking the first rule, I think we can safely say there have been many companies who, in retrospect, would have done well to take heed of it. You don't have to look too far for examples of games which demonstrated this rule; here are a few of the notables: *Sherlock*, *The Great Space Race*, *Swords and Sorcery*, and, of course, *Psyclapse* and *Bandersnatch*. Big things were expected of these games, not because of previews generating interest but on account of rather large advertising campaigns. Their high public profiles suggested that an enormous expenditure on hype could only possibly indicate a similar expenditure in time and effort on the program itself. Which leads me on to the second rule. . . .

Things are always more difficult than they look — but in the case of programming, things become nigh-on impossible. Take the balance between speed and length. The number of moving graphics will determine how quickly a game will play: too many moving graphics and all will be reduced to a snail's pace. If the graphics are stored in a compact form then the code to decipher them may well slow the game appreciably. The length of code becomes critical if the graphics are stored in the form to be displayed on screen, as a vast amount of memory is required.

It is difficult to know how this balance between speed and memory will work out until the project is well under way. Indeed, it may only be at this later stage when it is discovered the whole programming project was too ambitious in the first place. This problem besets all programmers but will affect those who work on orders from above to a greater extent.

Every software house worth its free publicity has a whole menagerie of Managing Directors, Marketing Managers, Public Relations Officers, Secretaries, Graphic Artists, Games Designers, Cover Artists and someone to make the tea (teaperson). This is a considerable number of people - even if the 's' signifies at the very most two people with each job title, and there is much overlapping of roles *eg* a Marketing Manager may make the tea, while Public Relations ensure each cup has the correct amount of sugar in it.

The problem is that the orders from above can come down so thick and fast, that they soon form a heavy overburden which begins to exert a significant pressure on the poor guy at the bottom — who is none other than our poor little programmer, struggling with the implications of our second rule. He may be having difficulty implementing some big idea from above, perhaps a film/TV/superstar endorsement, and and be desperate to get the game finished knowing how much the software house paid to secure the rights.

Don't get me wrong. The marketing, graphic and design skills are a very important part of the new mega-game blockbuster. All I am saying is spare some resources for the people actually programming - it may well pay off.

A CRASH Smash

THE FOURTH PROTOCOL

Producer: Hutchinson Computer Publishing
Price: **£12.95**
Language: **machine code**
Authors: **J Lambshead, G Paterson, Electronic Pencil Co**

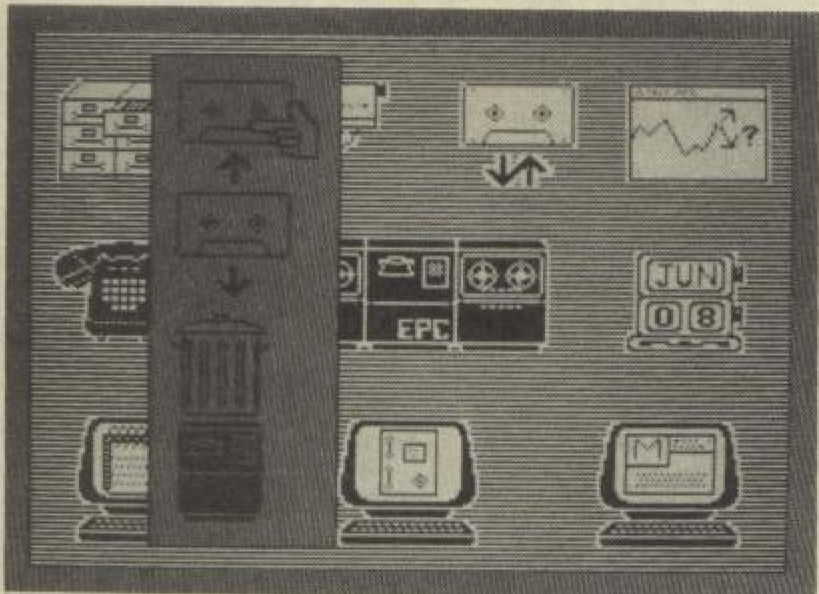
If the last book you read was the Beano annual 1978 then you may not be aware of the standing of *The Fourth Protocol* (the book) in the literary world — where it was received to great popular acclaim. Much of the panache of that Frederick Forsyth novel dealing with the murky depths of counterespionage is retained in this computer game. It boasts a development team of games designers, graphic artists and programmers, and on loading you can well believe it. The game's concept has been very well implemented and the graphics are attractive and impressive.

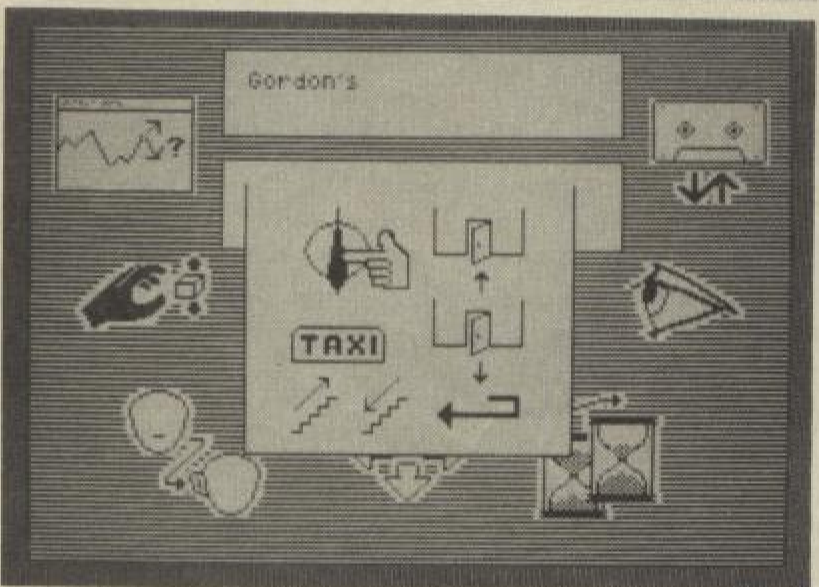
The plot goes like this: in a remote cottage just outside Moscow a Soviet General Secretary and the British traitor Kim Philby plot the most audacious offensive of the cold war, codenamed Plan Aurora. The plan is to destabilize Britain and force the disintegration of NATO. With the NATO pact out of the way Soviet forces would then be free to overthrow Western Europe. The idea is to renege on the Fourth Protocol, a part of the Non-Proliferation Treaty signed by the 1968 nuclear powers of Britain, USA and Russia. This involves the smuggling of a nuclear device into the UK and exploding it there just before the 1987 General Election. A KGB disinformation program will ensure the nuclear disaster is blamed on an American military installation. The election of a hard left government committed to withdrawal from NATO will lead to a totalitarian state in Britain. Your role is to play John Preston, MI5 investigator, who must uncover Plan Aurora and ensure that its insidious results are never realized.

Even as you take up your post as head of CI(A) a burglary is taking place somewhere in England. The burglar steals the Glen Diamonds but, more important, disturbs some secret NATO documents. The MOD mandarins receive these files and immediately get the Paragon Committee, whose sole concern is the source of the lost documents, onto the case. Your task is to find who is leaking the secrets, to whom they are being leaked, and why. Meantime, however, you must run a busy secret service department from your Cencom control network, maintaining as low a public profile as possible.

Nato Documents is the first of three parts on the tape and is an adventure/strategy game which uses an icon driven control system ie you point to what you want and then press ENTER to reveal further options. The heart of the game is the Cencom display which allows access to news reports, sitreps (situation reports), files, telephone calls (both in and out), surveillance of suspects, and self-assessment to see how you are getting on in your role as head of CI(A). By way of this series of menus and sub-menus the player can effectively control the whole organisation: all its in- and outgoings of both personnel and messages. A file can be read into your Cencom system's memory over the telephone from Blenheim, a building which contains the vast archives of MI5. As you might expect, however, codes must be deciphered and entered correctly.

Playing, the first thing you might like to do is to track down your personal list of telephone numbers as there is some important information available to you at Blenheim. You will need your one-time decoding sheets in order to enter the code of the week (which, strangely enough, lasted well over a





month when I played it). This allows you to download into your Cencom console valuable lists of Cabinet and Foreign Office staff who had access to the stolen documents. Those staff with access to photocopying facilities are shown — which may be significant, as the stolen documents were photocopies. All the while you must concern yourself with the running of a busy secret service department and this can even go as far as probing the private lives of the workers in your office. Miss Abbs has a fling with a foreign diplomat and you must decide what you are going to do about it, if anything. More important is finding out who leaked the NEC privatization documents to: the national press and dealing with the culprit.

An important part of security is surveillance and choosing the surveillance icon allows you the option of allocating up to 25 watchers to any one suspect, and withdrawing some or all of them as their activities become less critical. The assessment icon is also of great interest to the player as it reports back just how well the player is doing. Your prestige rating will change with the competence of your decisions and has a tangible effect on how many watchers MI5 are prepared to allocate you. These decisions are realistically difficult and you must take care not to air a scandal in public or feed the press any intrigue.

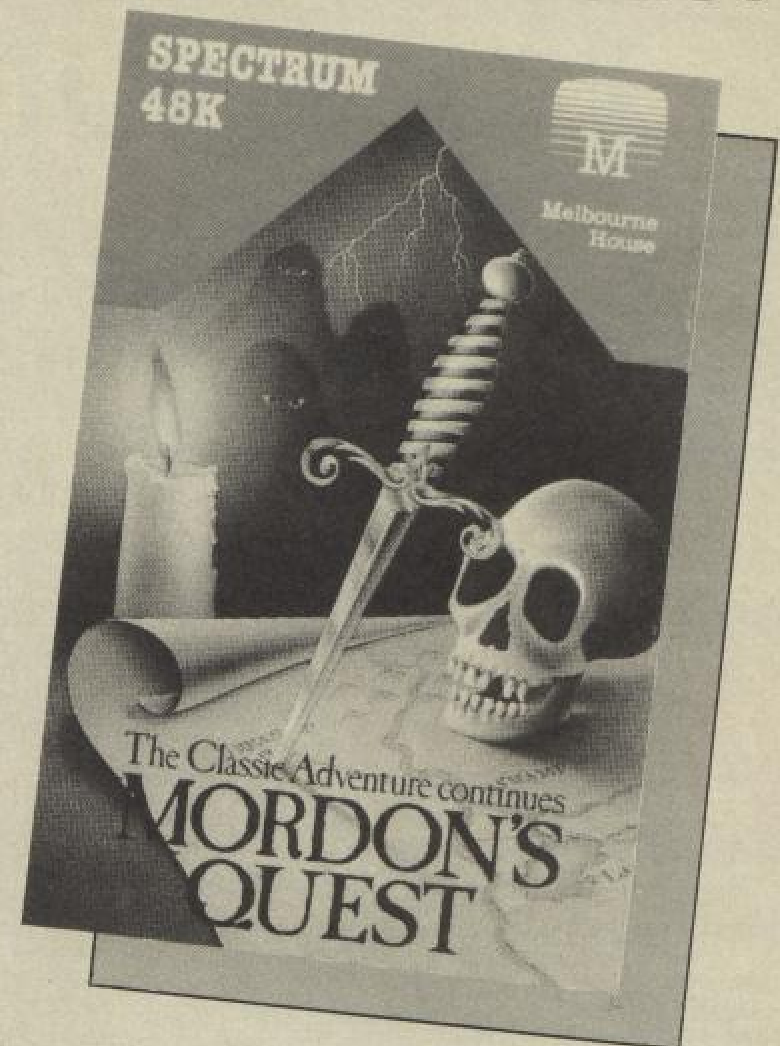
The Fourth Protocol:The Game consists of three independent programs - *The Nato Documents*, *The Bomb* and *The SAS Assault*. Secret codes are given when programs 1 and 2 are successfully solved and these words allow entry to the next part. The different parts make up a game which is truly original. It has been exceptionally well planned in that it is very easy to play right from the start and keeps your interest throughout.

COMMENTS

Difficulty: intricate plot
Graphics: good icon graphics
Presentation: professionally designed
Input facility: icon driven, sometimes has a tendency for an annoying auto repeat
Response: instantaneous
General rating: a highly playable and addictive adventure/strategy game

Atmosphere	9
Vocabulary	N/A
Logic	9
Addictive quality	9
Overall value	**9**

MORDON'S QUEST



Producer: Melbourne House
Price: **£6.95**
Language: **machine code**
Author: **John Jones-Steele**

The cassette inlay proclaims 'The Classic Adventure continues'. And so it does, as not only is this offering from the same author as Melbourne House's *Classic Adventure* (based almost entirely on the famous mainframe program) but it marks a return to traditional values in adventuring - puzzles galore, text compression to ensure a worthy length and the complete absence of pictures that might otherwise use up precious memory.

You wouldn't need a marketing executive to tell you that the best way to spruce up a text adventure is to redesign the character set and that's what we have here. Further, 40 characters a line, justified for a square, neat look, and a dash of attractive colouring convince the player someone has taken the time to get the appearance just right. As for the substance, here again, there is much to admire. The location descriptions are long, detailed and well-written. The plot is entertaining and each part of the story is interesting and imaginative. Offering six lives to save the player starting all over again each time a life is lost is a super idea.

Your quest is awe inspiring enough, to save the universe, and this is achieved by recovering the lost components of an immortality machine. The machine's owner is Mordon, the Ancient One, who appears before you early on, shrouded in light. Finding Mordon while you play is not so easy and needs a little wandering before he finally reveals himself. The exit from the curiously familiar house in which you find yourself leads into a mist-filled jungle where you encounter quicksand and many other sticky situations. You finally stumble into the ruins of an ancient city which conceals many old relics beneath its dust, such as pieces of machinery and old coins. These spare parts and treasures are very significant as your SCORE is comprised of these alongside the number of turns taken so far. On through caves, tunnels and jungles and seemingly thousands of years pass with each step as you are transported into a fantastic future world of perspex domes, flashing lights and ambient music.

The nuts and bolts of this adventure are on the whole encouraging, with the text compression allowing long narratives — the speech of Mordon lasts two full pages. Take this first location description for example. 'You are in the master bedroom, despite the richness

of the bed and the oriental carpet underfoot, the room is sparsely decorated. An indefinable atmosphere permeates the room, as if some great tragedy once occurred here. Tall sash windows face north and west. Large double doors open to the south'.

However, some aspects are unusual or perhaps even disappointing. I have previously stated an opinion on non-standard vocabulary so no two guesses for what I think about a game which chooses to use WHERE for LOOK when trying to redescribe a location or to see the result of some action, like switching on a torch. The EXAMINE command does not prove as useful as it might, and what is more, it is not error checked so EXAMINE XXX and EXAMINE TRANSPORTER both throw up 'You can see nothing special'. Most problems are logical but the first, which leads to the apparition of Mordon, is illogical and arbitrary.

There are many humorous interludes to your deadly serious quest of saving the known universe. I'll leave it to you to discover the consequences of EXAMINE ASHES or KILLing the carnivorous PLANT. More fun can be had in the cannibal's hut while you desperately try to find a way out.

Mordon's Quest is a traditional adventure and is in many ways an updated supplement to *Classic Adventure* from the same author. Due to extensive text compression the game is long - over 150 locations with a vocabulary of over 400 words. After playing many much more fanciful efforts this summer I very much enjoyed this game as it has long, atmospheric descriptions and the puzzles have been ingeniously interwoven into a fascinating fabric of clues and apparent dead ends. If you enjoyed *Classic Adventure* you'll like this one.

COMMENTS

Difficulty: moderate
Graphics: none
Presentation: reasonably neat and readable, uses 40 characters per row
Input facility: accepts sentences
Response: very fast
General rating: very good; a long, atmospheric game

Atmosphere	9
Vocabulary	8
Logic	8
Addictive quality	8
Overall rating	**8**

CONFIDENTIAL

Producer: Radar Games
Price: £6.95
Language: **Quill**
Authors: D Healey and C Guest

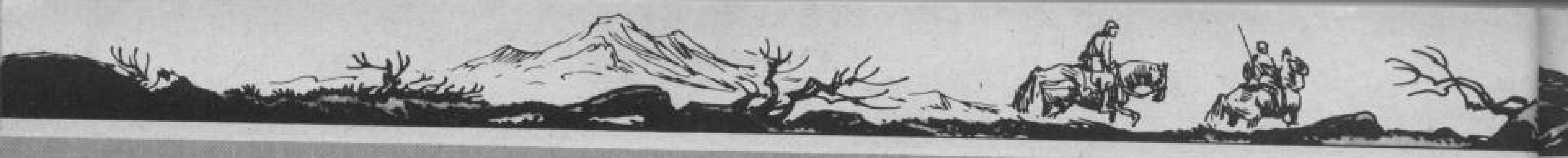
Confidential is undoubtedly from a small software concern, but the effort expended in making this an interesting game to play is evidenced in the extensive literature which accompanies the cassette. As well as the super (and accurate) map and notebook which every player receives, I had a good read of the Confidential File hints list, without which I would have found the going rather difficult to say the least.

The supporting literature makes much of this game finding its setting in the real world with real streets, bank, shops, nightclubs and a taxi office. Of course they aren't actually real in that they exist in the fictitious town of Fox Bay, but considering this game was written some time before last month's editorial it's certainly a welcome change to wander about a town which at least has a street map provided.

Confidential is the story of the disappearance of a Mr Richards, a property developer, from the small coastal town of Fox Bay, and the subsequent investigation carried out by the local private detective, Craig Adams. With suitable deference to one or two notables in this area, the game attempts to bring something akin to Cluedo to the adventure world.

You find yourself in the Craig Adams Detective Agency and faced with the immediate scourge of any office worker - the ringing telephone. But you are no sedentary 9 to 5 type and this call is a real humdinger, dropping a juicy pomegranate of intrigue right into your trench-coated lap. A Mrs Richards of Dale End, a western suburb of Fox Bay, is worried about her husband who has been missing for 5 days. All she knows is that he left for work as usual at 8.30 am on Monday morning and was to collect a special present for his son's birthday. Your mission is quite simple - find out what has happened to her husband.

The game which builds up from around this conversation involves you travelling around



(by car when out of town) collecting snippets of information which domino you around the circuitous route followed by the missing man. Your chief allies in this search are a keen ear for those salient facts which point toward the ultimate truths, and the passport discarded in Mr Richard's car which affords the very necessary identification when quizzing store assistants and other suspects who haven't got the foggiest who this Mr Richard is, or was, for that matter. I never did quite play enough to find out what exactly did happen to the guy, though I did begin to fear the worst.

Some aspects of the plot are quite complex, and to be honest, I would have found much of it a struggle were it not for the hint sheet kindly supplied by Radar. The vocabulary is not restricted to verb/noun to the extent that phrases like GIVE THE PASSPORT TO THE WOMAN must be entered to do the simplest of things. Since I tend to keep to verb/noun in the interests of time I entered PASSPORT WOMAN — a seemingly illogical statement. On the whole the game is not a friendly one. Which part of a name is accepted? For example, the **Club** part of Club Tropicana and the **Store part of** Department Store, but the **Richard** part of Richard & Ellis Developments, is annoyingly inconsistent - where only one part of a noun is accepted it helps if the program keeps to one approach throughout.

There are one or two onerous tasks every player will meet during play. One is the constant need to UNLOCK then ENTER the car when any distance is to be travelled. Another is the task of dropping an item before another can be picked up, made all the more essential by the program's devious construction which ensures there is little option but to do this every time. One curious one-off hitch is the inability to leave the maintenance bay with LEAVE MAINTENANCE. LEAVE GARAGE is needed and so to leave the garage LEAVE GARAGE must be repeated twice, once to leave the bay and the second time to leave the garage proper. Another (one-off!) is the necessity of opening a door in the taxi office which is described as being already open. Incidentally, I very much doubt if I could have got past the taxi office were it not for the hint sheet.

A more fundamental irritant is the need to interview suspects in the correct preset order otherwise certain crucial events, like the opening of banks and stores, will simply not occur. Interviewing Mr Ellis, a partner in the missing man's firm, is a particularly crucial stage; missing it could leave you thrashing around the garage or high street to no avail. This interview also marks the time when the local constabulary decide your car would be safer in their car pound.

Because of this fundamental constraint on your actions, and the order in which you may carry them out, the adventure takes on that distinctive linear look, where before a problem can be tackled the one before it in the line must be laid to rest.

Confidential is a well-presented, attractive, Quilled, text-only adventure. In terms of storyline and plot it is significantly above average and clearly represents a considerable amount of work on the part of the programmer.

COMMENTS

Difficulty: quite difficult
Graphics: none
Presentation: quite good
Input facility: basically verb/noun
Response: instantaneous
General Rating: original plot, definitely worth exploring

Atmosphere	7
Vocabulary	6
Logic	7
Addictive quality	7
Overall value	7



ADVENTURE TRAIL REVIEW RATINGS

ATMOSPHERE: reflects quality of location description and graphics and how credibly characters behave.

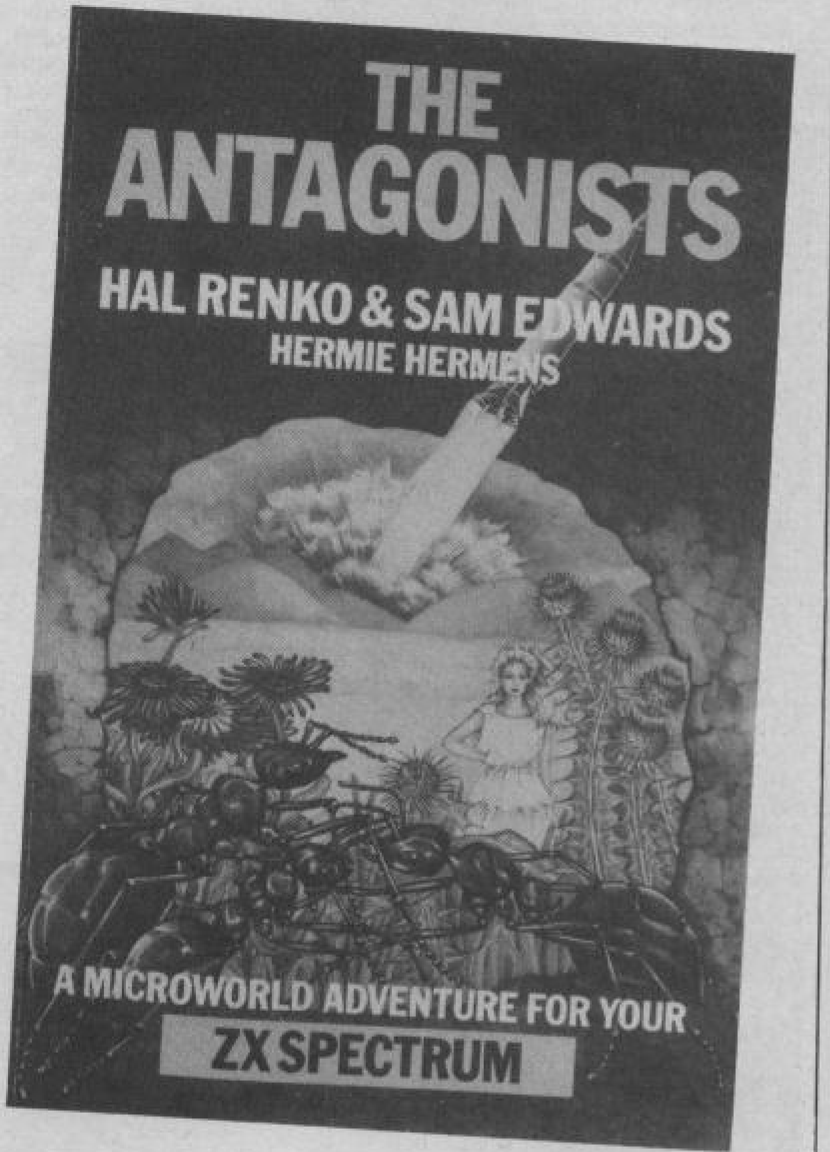
VOCABULARY: the completeness of the vocabulary and friendliness of response. All words and associated words (objects etc) in location descriptions should be included.

LOGIC: reflects the logic of the problems encountered and whether or not you are likely to be killed without warning or chance of escape.

DEBUGGING: indicates the level of crashproofing. A program should not be crashed simply by making an incorrect entry or by pressing an unfortunate combination of keys.

OVERALL: general rating based on price and the other ratings BUT NOT AN AVERAGE OF THE OTHER RATINGS.

THE ANTAGONISTS



Producer: Addison-Wesley Publishing
Price: **£5.95**
Language: **machine code**
Authors: Hal Renko, Sam Edwards, Hermie Hermens

The Antagonist, a Microworld Adventure from Addison-Wesley Publishing, follows *Arendarvon Castle*, reviewed last month. Once again you can buy the book and type in the program or buy both the book and program. Both games have a very similar format with an interesting and highly informative book supporting unimaginative and somewhat primitive software. It's difficult to do the game justice in this review with such lacklustre coding, so much of what I will say will necessarily pertain to the book which looks very much like any other that might be found lining the shelves of a bookshop. Its content is also impressive and sets in motion a process I very much admire in that it encourages the player to seek out and use information from a dossier file which, taken as a whole, describes the strange world in which you find yourself.

The file you carry has some diary entries of one Albert Renshaw, more of whom later; a book on flowers by a learned professor; a publication from the James Arwell Society commemorating one of the greatest scientists who ever lived; and a guide to INSECTOLAND, an insect Disneyworld built in the 23rd century.

Albert Renshaw's diary might just be as boring as anyone else's were it not for one thing - in a world dominated by insects and ruled by ants it was he who had the dubious distinction of being the last surviving member of planet Earth, a sort of Omega Man armed with fly spray. As every budding 20th century biologist knows, the insects, which are the largest single group of animals on Earth, have one serious limitation imposed upon them by the way in which they breathe — through pores and the tubes which lead from their tough outer skeletons — which prevents them from reaching any threatening size. So why





Two Leprie children. Note the peculiar hair-style often worn by Leprie children, and the absence of shoes; the feet are often wound in rags. The ball is almost certainly a found object.

doesn't our Renshaw chappie don a large pair of boots and simply walk all over his assailANTS?

Well the answer lies in the curious delight afforded any blue blooded scientist by meddling in areas he knows next to nothing about. In this case the 21st century had not only produced curios like chemical sociology and psychological physics but a wondrous growth hormone which certainly grew livestock and foodstuffs more quickly, but also had the disconcerting effect of spawning whopping great big creepy crawlies which had the wherewithall to try and flush YOU out of the bath.

All good science fiction turns humour into a satirical scalpel, and this book is no exception. Two funnies stick in the mind particularly. The first relates how, as insects got bigger, so did the movement concerned with insect welfare and the second how the prefaces to The Book of Flowers tells of the way in which a Professor Rosebush's classification supercedes that of the deceased Professor Lanuski's even though Lanuski, the previous editor of the treatise, had expressly attacked Rosebush's classification in an earlier preface. Hence the prefaces relate how classifications only last as long as their proponents and, more generally, how science is full of pompous pedants.

Turning to the adventure itself, much of the early play is within fields and the caves beyond them. Throughout the adventure you must research and make reference to your dossier (which in reality is the glossy softback book) and this first part is no exception. In the fields are scattered various flowers and as you climb their stems you relate the on-screen information with that in the Book of Flowers. This however is no easy task as the program is deviously sketchy with one or two of its descriptions, but of course, some are instantly recognizable and you then refer to the guide with renewed confidence. The flowers are realistically, and usefully, divided into the niches of marine, fresh, swamp, wet and dry.

There's just a touch of sci-fi philosophy within the James Arwell Soc publication. It puts forward the hypothesis that the hallmark of true genius lies not in the complexity of a theory but in its simplicity and accessibility — and so it reckons Elvis Presley and Michael Jackson were the real geniuses when compared to the likes of Bach, Mozart and Beethoven. (An interesting theory on the rise of popularism and the decline of Radio 3). The publication also tells of the Lepries, who have a total lack of physical beauty but are friendly enough, and the Tenins, who are similar to elves but can change rapidly in mood to become dark and deceitful. Lepries enjoy a kind of blueberry soup which turns the leprie blue except for the hands which become a bright yellow hue.

The guide to INSECTOLAND gives information and clues concerning the various giant ants, bees, flies, beetles and butterflies which inhabit the park. A creature you will soon be looking up in the guide is the glowworm which emits light during its whole life-span, and we learn how the production of light decreases if the worm is deprived of honey.

The Antagonist is a fine book, but the poor quality of the software on the tape lets it down. It's a little amateurish to expect the player to type RUN after the first part of the program has loaded in. The appearance of the screen is very dull with the original black Spectrum print left on a glaring white background. If you load the first part of this program you may find it better to then add 100 INK 6 : PAPER 0 : BORDER 0 : CLS and then SAVE 'ANTAG' LINE 1 which will allow an auto RUN.

Although the book creates a good atmosphere, the location descriptions in the program are sparse and disappointing. Some locations have nothing on your present predicament but merely tell you what is in adjacent areas, which gives certain regions an anonymous feel. As with the first game, the vocabulary is very limiting and there doesn't appear to be any equivalent of EXAMINE. The game is not difficult but trying to correlate the cave system to its textbook equivalent may take some time.

The Antagonist is a noteworthy project but I feel more effort could have gone into the programming aspect which, after all, is what most software is all about!

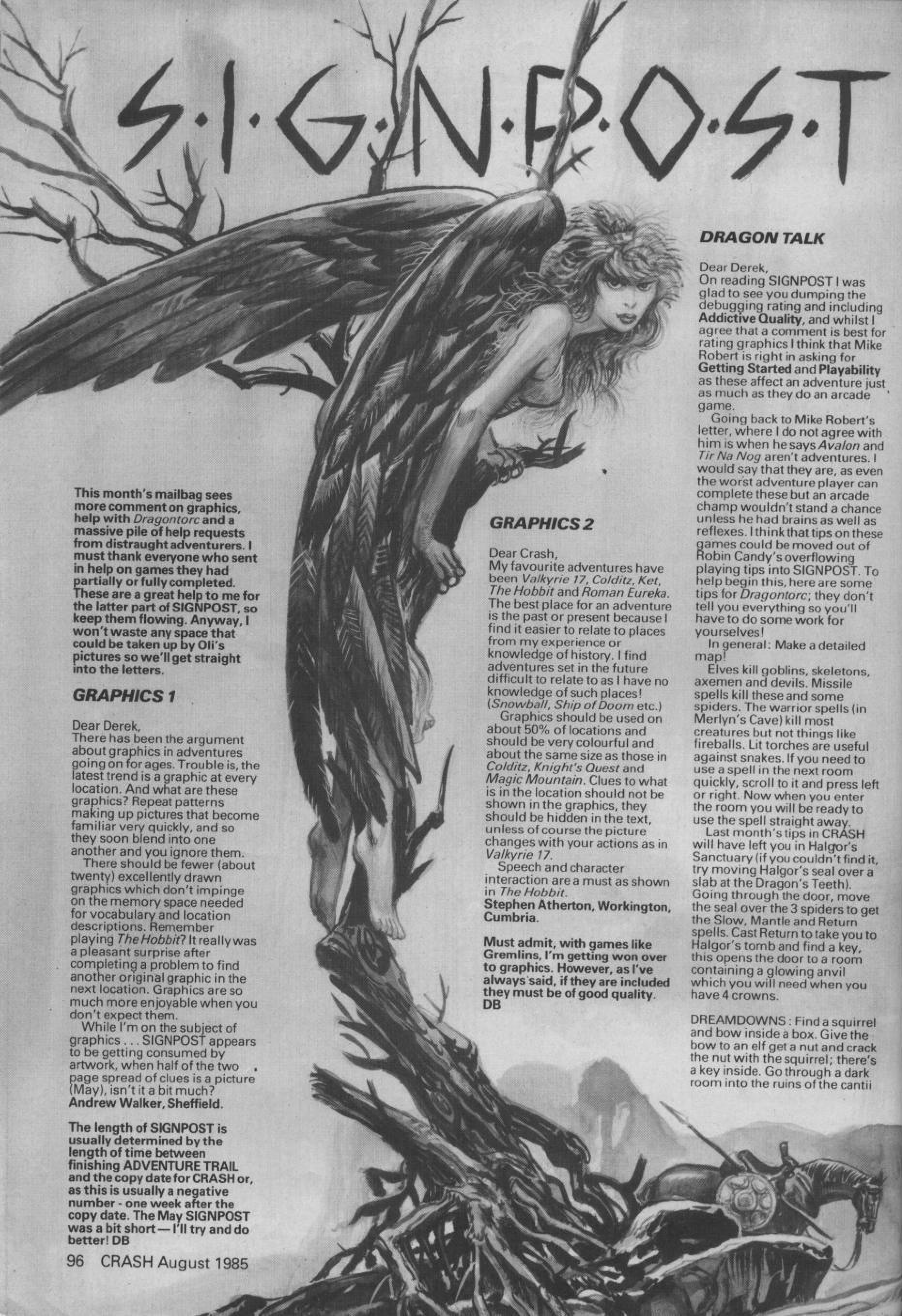
COMMENTS

Difficulty: quite easy
Graphics: none
Presentation: poor
Input facility: generally verb/noun though needs a weapon specified for combat
Response: very fast
General Rating: detailed and interesting book, program locations poor

Atmosphere	**7**
Vocabulary	**5**
Logic	**8**
Addictive quality	**6**
Overall value	**6**



Lepries at leisure.



S·I·G·N·P·O·S·T

This month's mailbag sees more comment on graphics, help with *Dragontorc* and a massive pile of help requests from distraught adventurers. I must thank everyone who sent in help on games they had partially or fully completed. These are a great help to me for the latter part of SIGNPOST, so keep them flowing. Anyway, I won't waste any space that could be taken up by Oli's pictures so we'll get straight into the letters.

GRAPHICS 1

Dear Derek,
There has been the argument about graphics in adventures going on for ages. Trouble is, the latest trend is a graphic at every location. And what are these graphics? Repeat patterns making up pictures that become familiar very quickly, and so they soon blend into one another and you ignore them.

There should be fewer (about twenty) excellently drawn graphics which don't impinge on the memory space needed for vocabulary and location descriptions. Remember playing *The Hobbit*? It really was a pleasant surprise after completing a problem to find another original graphic in the next location. Graphics are so much more enjoyable when you don't expect them.

While I'm on the subject of graphics . . . SIGNPOST appears to be getting consumed by artwork, when half of the two page spread of clues is a picture (May), isn't it a bit much?
Andrew Walker, Sheffield.

The length of SIGNPOST is usually determined by the length of time between finishing ADVENTURE TRAIL and the copy date for CRASH or, as this is usually a negative number - one week after the copy date. The May SIGNPOST was a bit short — I'll try and do better! DB

GRAPHICS 2

Dear Crash,
My favourite adventures have been *Valkyrie 17*, *Colditz*, *Ket*, *The Hobbit* and *Roman Eureka*. The best place for an adventure is the past or present because I find it easier to relate to places from my experience or knowledge of history. I find adventures set in the future difficult to relate to as I have no knowledge of such places! (*Snowball*, *Ship of Doom* etc.)

Graphics should be used on about 50% of locations and should be very colourful and about the same size as those in *Colditz*, *Knight's Quest* and *Magic Mountain*. Clues to what is in the location should not be shown in the graphics, they should be hidden in the text, unless of course the picture changes with your actions as in *Valkyrie 17*.

Speech and character interaction are a must as shown in *The Hobbit*.
Stephen Atherton, Workington, Cumbria.

Must admit, with games like Gremlins, I'm getting won over to graphics. However, as I've always said, if they are included they must be of good quality. DB

DRAGON TALK

Dear Derek,
On reading SIGNPOST I was glad to see you dumping the debugging rating and including **Addictive Quality**, and whilst I agree that a comment is best for rating graphics I think that Mike Robert is right in asking for **Getting Started** and **Playability** as these affect an adventure just as much as they do an arcade game.

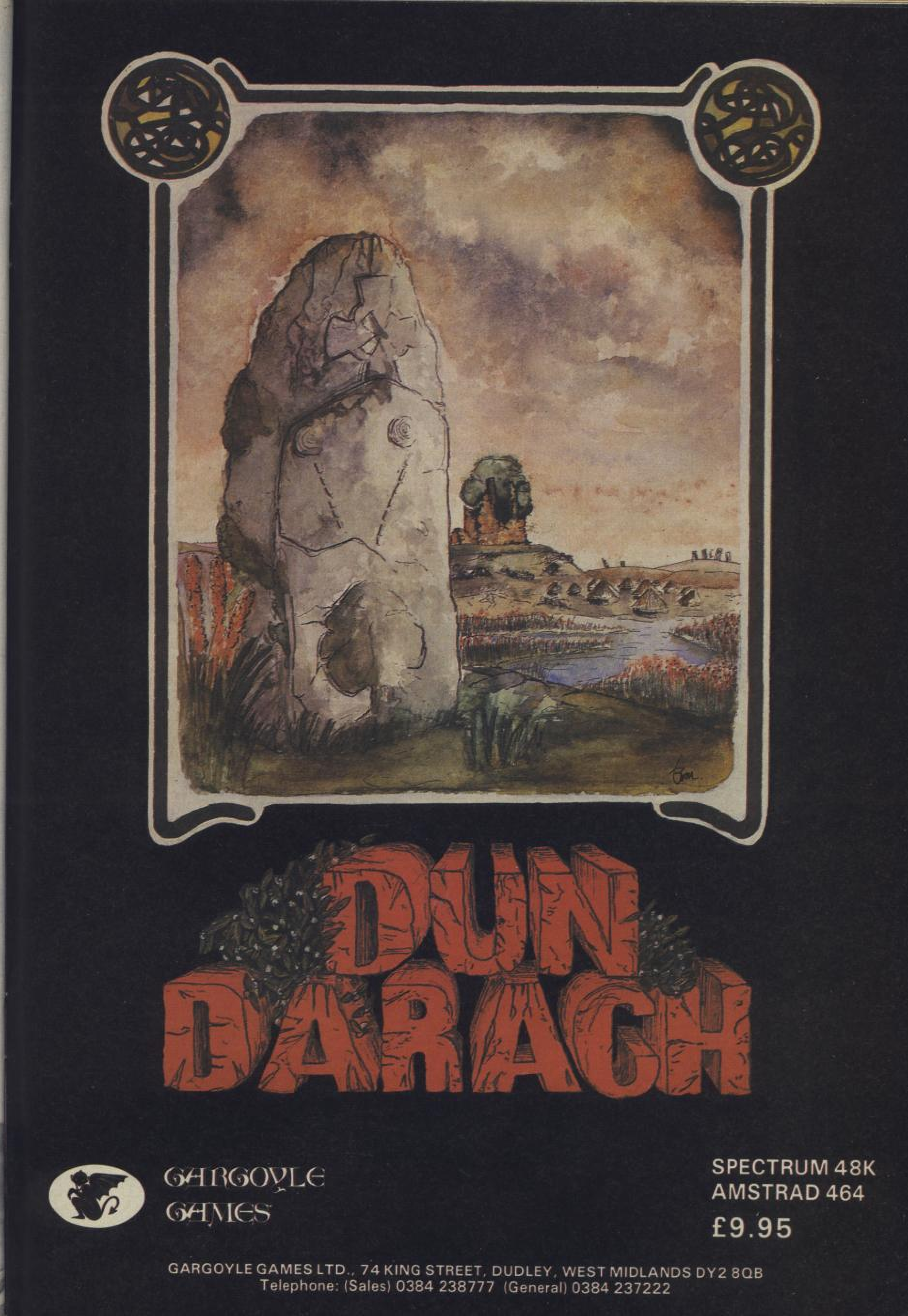
Going back to Mike Robert's letter, where I do not agree with him is when he says *Avalon* and *Tir Na Nog* aren't adventures. I would say that they are, as even the worst adventure player can complete these but an arcade champ wouldn't stand a chance unless he had brains as well as reflexes. I think that tips on these games could be moved out of Robin Candy's overflowing playing tips into SIGNPOST. To help begin this, here are some tips for *Dragontorc*; they don't tell you everything so you'll have to do some work for yourselves!

In general: Make a detailed map!

Elves kill goblins, skeletons, axemen and devils. Missile spells kill these and some spiders. The warrior spells (in Merlyn's Cave) kill most creatures but not things like fireballs. Lit torches are useful against snakes. If you need to use a spell in the next room quickly, scroll to it and press left or right. Now when you enter the room you will be ready to use the spell straight away.

Last month's tips in CRASH will have left you in Halgor's Sanctuary (if you couldn't find it, try moving Halgor's seal over a slab at the Dragon's Teeth). Going through the door, move the seal over the 3 spiders to get the Slow, Mantle and Return spells. Cast Return to take you to Halgor's tomb and find a key, this opens the door to a room containing a glowing anvil which you will need when you have 4 crowns.

DREAMDOWNS : Find a squirrel and bow inside a box. Give the bow to an elf get a nut and crack the nut with the squirrel; there's a key inside. Go through a dark room into the ruins of the cantii


DUN DARACH
GARGOYLE GAMES
SPECTRUM 48K
AMSTRAD 464
£9.95
GARGOYLE GAMES LTD., 74 KING STREET, DUDLEY, WEST MIDLANDS DY2 8QB
Telephone: (Sales) 0384 238777 (General) 0384 237222

and let your elf kill off all the axe throwers. Open a box with the key to get a magic symbol which takes you down to some more ruins. I'll just say that there's a crown down there somewhere, and that the Light Spell in Witchwoods will be useful . . . but I'll leave the rest up to you.

WITCHWOODS : Here can be found a frog, a bat and a herd: take these to the cauldron to get a wand which can be used to find a halfmoon, combine this with 'the vault key lies in sanctuary' message.

TORHENGE : Find a rather cute bunny and take him to some burrows to find his friend and a key. This key opens a box with a symbol inside. Now take your bunnies to some carrots, to find a slab which is opened by the symbol and go down to the Cursed Crypt. By taking various symbols to signs on the walls that produce skeletons you can reveal a leycube and escape.

DRAGONS TEETH : As well as Halgor's Sanctuary you can find a divining rod which will uncover a Bane spell in the leaves and a crystal of antithought in a pool.

TROLL STONES : Find a coin in the stump and chuck it in the pool to enter Hellsmouth. Get an axe and smash the stone in the cyan room to find a key which opens a box with a magic symbol in it. Use this to uncover a leycube to get back out.

WYRM CRAG : Swap jewels with the elves for a key (opens a box that contains a spell) and a torch, which can be lit at a fire and used to kill snakes. In the fire clearing, open a box and give the bow inside to the third elf: the key you receive will open the door to the Citadel of Morag. Take an elf in with you; he will kill almost anything and when he dies go and fetch another one. Use the detect spell to reveal invisible goblins and use Undo on a green key to stop it producing snakes; it will open a box with another key inside which opens doors leading to Morag herself!
A Bailey, Carshalton, Surrey.

I do tend to think these type of games should be included in A.T. and SIGNPOST, however Robin Candy and the Big Boss tend to be confused on this matter. Problem is they're so good everyone wants to write about (that's a euphemism for play!) them. Anyway I'll award a prize of *Dun Darach* to this letter since I got stuck down a hole at the beginning (If you're confused, so was I!). DB



S·U·P·E·R·H·E·R·O·E·S

I've had so many letters from successful explorers asking if they were the first to complete a certain adventure I've decided to start a SUPERHEROES section in the October issue. The first person to complete a particular adventure will achieve fame (the Boss won't allow any fortunes!) by having his or her name and achievements published . To qualify you must give the date you completed the game (it shouldn't be much different to the postmark on the envelope), a few hints on how you achieved it and most importantly what happened at the end. Games reviewed before the July issue don't qualify as they will already have been completed many times.

Steve Richardson, from Aylesbury asks: Could you please tell me how to obtain money in Valkyrie 17 and also how to enter the cable car? **To obtain money, you will need to QBXO UIF OFDLMBDF JO UPXO. From the town you can use the cable car by UZJOH UIF TUSJOH UP UIF MFWFS. Earlier on in the same game, Christopher Manley of Norwich is having difficulty arriving at the bottom of the ski slope alive! You must first SFBE UIF CPPL JO UIF IPUFM.**

The Guardians in *The Final Mission* are still causing problems, Philip Difoko from Glasgow writes for help in passing Guardians 1, 2, 4 and 5. Guardian 2 is a red herring. Guardian 4 asks red circle, green square, what has Edgar that the arrow hasn't? Answer HB. Subtract SFE GSPN FEHBS. I gave the answer to no 5 last month and I'll leave no 1 for another day!

In *Velnor's Lair* G. L. Levouich from Norway has fed the Crocodiles and has a bath tub but is still unable to cross the river. You need the PBST GSPN UIF USPMM MBJS.

Recent Adventure International games have proved exceedingly popular. About the game *Spiderman*, W. White of Aldershot writes: If your spider sense tingles towards electro you can jump out of the way of his electrical bolt, but how do you defeat Doctor Octopus or Electro and start the computer controlled presses?. **To defeat them both together HFU PDUP, IJU FMFDUSP. Also in this adventure, Murdoch Macdonald is having problems with the Ringmaster. To defeat him QVTI LOPC, UVSO LOPC.**

In *The Hulk*, Lee Blaber from Leicester is unable to attract the ants to follow him to rescue Ant-man. Simply HFU BOUT.

In the excellent *Gremlins*, Keith Rangasamy of Croydon is having progress restricted by the locked door. To open it you will need to ESPQ HJANP CFTJEF TNBTIFE WFOU.

ENCRYPTION CORNER

It's easy to speak Brewster!

Using this handy decoding scroll, just check off the letters in 'Brewster' one by one, writing down the English equivalent, and all will be revealed!

ENGLISH :	ZABCDEFGHIJKL
BREWSTER	ABCDEFGHIJKLM
ENGLISH :	MNOPQRSTUVWXY
BREWSTER	NOPQRSTUVWXYZ

Andrew Fairbaim of Wickford, Essex is having difficulty passing the beast in the well in Artic's *Eye of Bain*. You should DBSSZ SVCZ, TBZ 'GJSF'. This solution was kindly provided by a Richard Evans.

In *Snowball*, Robert Hardy from London is having difficulty reviving a crew member without her screams attracting a nightingale. You will need to provide a DSJOL.

The Angel of Death in *Tower of Despair* has proven troublesome for many adventurers, J. Edwards is having difficulty finding the dagger to use against it. At the start of the game you must QSBZ JO UIF DIBQFM.

I wasn't going to answer any more questions on *Kentilla* as I've given away most of the game already, however, Steve Hull from Kettering has managed to bribe me and writes: Please, please, please, could you include this in your SIGNPOST column, in your magazine?

My anger is growing due to the fact that I just cannot get into Tylon's castle or get past the staircase in the Black Tower. Also what has the Carawood Oracle to do with any of these?

By the way please tell me how to get the iron bar without getting the Black Death? Do you need to kill the guard in the tower or just persuade him to let you pass.

If Timandra dies as he has done, is there any way in which he can be brought back to life?

Also please tell me how to use the Velmista.

I do like these nice short questions! Anyway, to get into Tylon's castle you will need Zelda and Timandra alive.I'm afraid when anyone's dead - that's it! To get up the stairs the Guard must be defeated, remember Trolls are allergic to sunlight! When you get the iron rod you always catch the Black Death. You must cure yourself. As for the Velmista, it can be eaten.

After all this I hope your cheque is now in the post Steve!

And that's it for another month, I've run out of time again. Please send letters to SIGNPOST, CRASH MAGAZINE, P.O. Box 10, Ludlow, Shropshire, SY8 1DB.

'Hey maan . . . this game is just so violent . . . I mean, what the world needs is real Zarjaz peace, and free macrobiotic grub. . . .' *(Get out of it Minter, Go ON . . . clear off! — Comps Minion)*

WAY OF THE EXPLO



Burp! Not only are MacDonut's new Llama Burgers in Spicy Yak sauce a first rate nosh, they're just what you need to prepare yourself for a nice violent session of screen martial arts, courtesy of MELBOURNE HOUSE's new armchair action fighting game **Way of the Exploding Fist**.

We've been working out with the Commodore 64 version of the game in the office, and have slain countless opponents — just wait till the Spectrum version arrives!

One hundred lucky CRASH readers will be amongst the first to get hold of a copy of this first-rate game, as the lovely Paula Byrne from Melbourne House has agreed to offer 100 copies of the game as prizes for this competition. To top it all, the Number One ranked winner will also pick up his or her very own karate outfit to wear while getting into the action for real. No ordinary outfit either, this is the real kazoo, complete with shin guards, groin protectors (whatever they're for) and a host of other handy peripherals.

'So what've I got to do', I hear you cry.

No, you haven't got to eat a Llama, scale Mount Everest, sell double glazing or dance the Fandango in wellingtons . . . just find the words listed below in the wordsquare grid, mark them neatly and post your entry to PAULA BYRNE IS WONDERFUL, PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB to arrive by first post on 29th August.



DING FIST

Crash Competition

FIST
KIAI
KICK
BLOCK
THRUST
ROUNDHOUSE
KARATE
JABPUNCH
SOMERSAULT
EXPLODING

K	A	R	T	E	X	E	B	L	R	O	D	V	U
F	K	I	C	K	G	X	S	R	O	H	I	U	J
G	C	F	F	K	V	P	H	O	U	S	D	Y	S
A	B	L	O	K	H	L	D	U	N	G	U	H	K
S	L	T	F	C	J	O	A	N	D	A	X	T	O
I	O	R	K	I	C	G	T	D	H	E	W	Z	F
S	C	M	H	T	G	N	I	D	O	L	P	X	E
A	K	G	E	H	F	I	S	K	U	R	V	O	P
B	O	I	T	R	A	F	H	S	S	R	W	B	L
I	O	C	K	U	S	A	T	H	E	V	C	E	J
G	Q	U	A	S	T	A	C	H	O	U	S	T	I
H	K	E	A	T	S	N	U	R	E	T	N	I	M
E	B	L	O	K	U	I	T	L	S	K	C	U	S
A	B	K	O	P	E	D	Y	E	T	A	R	A	K
D	F	K	B	C	X	G	I	G	H	S	F	K	H
X	I	A	O	D	C	H	D	A	X	G	P	P	S
J	J	A	Z	I	S	A	N	F	I	S	T	F	S
Z	Z	A	P	R	U	L	E	S	O	K	Y	A	H

Name ______________________

Address ______________________

____

____

Postcode ______________________

First correct solution out of the Llama Burger box wins the Karate Suit and a copy of the game, and the next 99 winners get their very own, personal copy of the game itself.

CRASH COURSE



by Rosetta McLeod

. . . ON THE NEED FOR DOCUMENTATION AND BACKUP MATERIAL. . .

I imagine that many readers of this column will have been watching the series of programmed The Learning Machine **on BBC television, which look at the use of computers in education.**

One point that was made quite forcibly by teachers and educationalists who were interviewed about the merits or demerits of educational software, was that publishers are simply not listening to what they require for school use. Few teachers would buy a textbook to use with their pupils which was not written by someone with teaching experience; they are, however, expected to purchase educational software which has not been designed by experts. Even well-known and respected educational publishers like *Longman* and *Macmillan* are not exploring fully the potential of the software they are marketing.

What is needed, both for use in the home and in schools, is greater documentation to accompany the software. The *Postman Pat* program reviewed in this month's column, for instance, is very good as far as it goes — but even Nicholas, the three year old who tried out the game for me, was quick to point out the demerits. Although it gives useful practice in directional skills, this game does little to extend the child's creative imagination, and Nicholas said he would have liked a story to go along with the package.

There is now an increasing number of programs, particularly those written for children, which have the potential for directing the user towards literature or other textual materials and could easily be used as a springboard into other related areas of activity. Programs intended for use in schools should be accompanied by reasonably comprehensive notes for the teacher, at the very least, and ideally by workbooks for the pupils.

Unfortunately, though, software producers seem to consider the programs as entities in themselves, and not as a core or stimulus for other related tasks. These producers bemoan the fact that their products are not being purchased as avidly as they would have liked by parents and teachers, yet they fail to realise that the purchasers want more support and direction.

If more publishers were willing to provide additional material for use with their educational software, they would be meeting a real need and encouraging micro users to make much more constructive use of their machines. No doubt they would also sell more software!

PICTURE LOGIC

Producer: Addison Wesley Software
Memory required: **48K**
Retail price: **£22.75**
Writers: **Heather Govier and Malcolm Neave**
Age range: **Primary school children**

Picture Logic is really a version of Logo, the simple programming language suitable for young children. The idea behind this program involves the use of an arrow displayed on the screen (*Picture Logic*'s version of the Logo Turtle), which the user moves around to create geometric patterns and pictures.

In order to tell the arrowhead what to do, the child needs to analyse what he or she would have to do to make a path of the same shape. Careful thought is therefore required, before the arrowhead can be given appropriate instructions.

In common with all Logo-type software, *Picture Logic*'s most significant feature is that it is interactive. The child should be able to see the effect of commands at once, so that he or she can see right away if the instructions given to the computer produced the expected pattern. In this program, however, there is a delay of quite a few seconds between the command being entered and the response appearing on the screen, which can be rather frustrating for a young child. This delay can be slightly reduced, although not completely eliminated, if the arrowhead is 'hidden' rather than displayed continually. Unfortunately the package has been programmed in BASIC, which partly accounts for its lack of speed.

Another problem is that each line of a multi-line procedure has to be ENTERED separately. This results in each line being cleared from the screen as the subsequent instruction line is ENTERED. It would have been better if an entire procedure could be typed onto the screen and then ENTERED as a block after the END statement. A further shortcoming it that the maximum angle that can be turned right or left is 180 degrees, which is rather limiting in that the child is not able to see the relationship between turning right through 90 degrees and turning left through 270 degrees. (Incidentally, the error trapping routine used to check that you haven't attempted to turn through more than 180 degrees is also used to govern movement.)

Having said that, however, there are a number of excellent touches to the program. A scale facility has been incorporated, which makes the program easier to use with very young children, and a HELP facility gives access to a list of all the commands available and an optional explanation of the effect of each command. The HELP facility is not global, however, and cannot be accessed from any point in the program which limits its usefulness.

Picture Logic comes complete with two excellent booklets: one, a User Manual, aimed at the adult and the other a book of guidance for the child's use, which is beautifully laid out and details the various stages in using the software in simple terms. This booklet also contains Challenges for the child to complete as a way of reinforcing learning.

Though expensive, this is a very professional and thorough package, which should be enjoyed by every child interested in computing.

COMMENTS

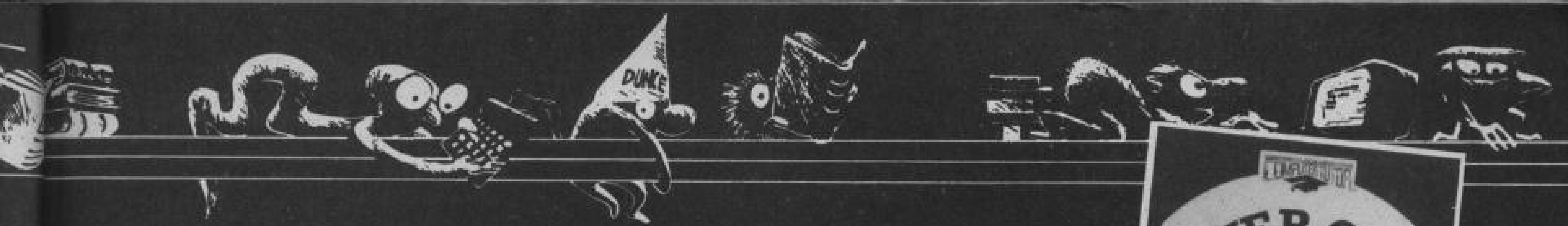
Control keys: the child uses the keyboard to enter Logo-type commands, such as FD 60 which draws a line 60 units long from the position which the arrow is occupying in the direction it is pointing (Forwards)
Keyboard play: very slow
Use of Colour: black and white only
Graphics: clearly drawn
General rating: the slowness of the response to commands spoils and otherwise excellent program. The documentation is of a high standard, but the programming detracts from the advantages of the language it seeks to emulate - LOGO.

POSTMAN PAT'S TRAIL GAME

Producer: Longman
Memory required: **48K**
Retail price: **£5.95**
Writer: **Micromega**
Age range: **4 to 6 years**

This program is, of course, based on the popular character *Postman Pat* from the children's books and the television series. The aim of the game is to drive *Postman Pat*'s van around Greendale to find the person or animal which has left a trail or footprints along the road. He then has to return to the post office with help from the tracks. Points are lost each time the van is driven into the verge or into a cow blocking the road, and the quicker you deliver the message and return to the post office, the fewer time penalty points you lose.

The game has six levels of difficulty, which encourages the child to develop his or her problem-solving skills. The higher the level, the more cows will be blocking the road and the player needs to decide whether



to wait until the animals move or attempt to follow another route, possibly trying a short cut instead of following the tracks on the road. The van is moved with the cursor keys or with a joystick, and the program is useful for developing manual dexterity as well as for encouraging an awareness of directions.

Although children love anything to do with *Postman Pat*, I didn't find that this program held their interest for very long. A bit more variety in the tasks would have livened things up a bit, and the irritating sound drove us all to distraction after a while.

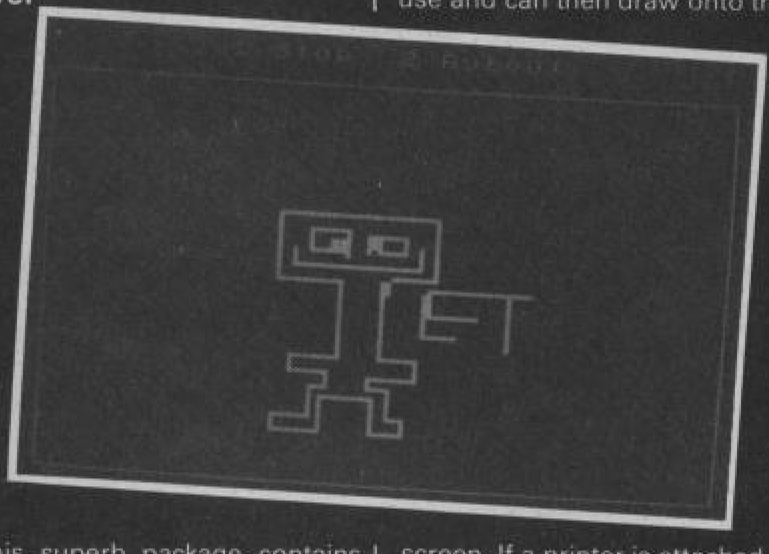
I welcome programs, based on popular characters, which have been written for young children but it would be nice to see the games directly related to stories in which the characters appear. In this way, children could be required to read the stories before playing the games. The inclusion of more detailed guidance for parents would also be useful, as programs like this for the very young child are beneficial only with fair amount of adult support.

COMMENTS

Control keys: move van with cursor keys — 5,6,7,8. Much easier with the joystick option.
Keyboard play: keys have to be pressed very firmly, which is a problem for the very young child.
Use of colour: bright and clear
General rating: quite good for the very young pre-school child. Five and six year olds find it rather uninspiring

PARTY TIME

Producer: Argus Press Software
Memory required: **48K**
Retail price: **£7.95**
Writer: **Computertutor (Clever Clogs series)**
Age range: **3 years and over**



This superb package contains six simple educational games for very young children. At the start, the player sees on the screen an invitation to the party, then the list of the games which can be played (sometimes the computer will choose the game which is to be played). All of the games are very short, so that the child does not become bored and lose interest too easily, and they all end with a burst of music, which he or she will soon come to recognise.

In *Matchup*, the computer draws a set of five shapes, one of which has to be matched with the sixth shape which is drawn. *Counting*, *Find It* and *How Many* all teach the use of numbers, simple arithmetic and basic keyboard skills. The parent can specify the maximum number to be used in the counting game and the highest number achieved in the answers to the addition game and can also enter specific numbers and letters for the child to practice with.

The final two games, *Gobbler* and *Paintbox*, are particularly good for developing manual coordination and directional sense — my young testers enjoyed *Paintbox* most of all the games. The player begins by selecting the colour he or she wishes to use and can then draw onto the screen. If a printer is attached, a permanent record of the picture can be output, which could then be coloured in . . . .

This is an extremely well-designed package and, as with all the *Clever Clogs* programs, has been thoroughly researched with the help of children, teachers and parents.

COMMENTS

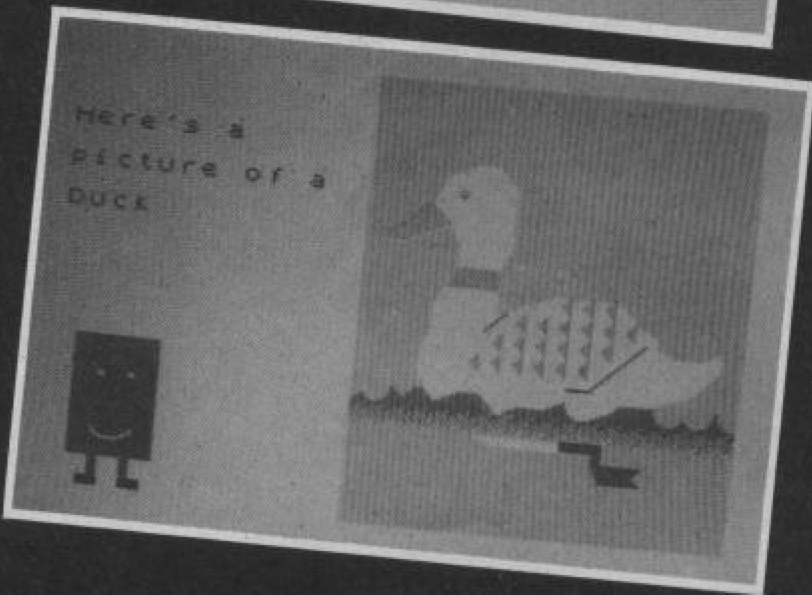
Control keys: parents can choose which keys to feature in some of the games
Keyboard play: very responsive
Use of colour: very good
Graphics: very clear
General rating: highly recommended

JUNGLE JUMBLE

Producer: Argus Press Software
Memory required: **48K**
Retail price: **£7.95**
Writer: **Computertutor (Clever Clogs series)**
Age range: **5 and over**







This user-friendly program contains two games for young children. In the first, the player has to answer a series of questions correctly to reveal a picture of either a real animal or a silly animal. The questions are mainly based on simple arithmetic and general knowledge such as: '2 stars plus 3 stars — How Many?' and 'Which is the mummy? 1) bull, 2) cow, 3) ram'.

When the child has successfully revealed the animal, then he or she can move on to the Safari game in which the player has to move a car, controlled by the cursor keys, across the countryside to the camp in only 40 moves. Occasionally an animal will pop out, and the player is asked to type in the first letter of its name.

Like most of the programs in the *Clever Clogs* series, *Jungle Jumble* contains the facility for editing or resetting the questions, and some useful tips are provided for parents who wish to do this.

My young testers thoroughly enjoyed this program, delighting particularly in the silly animals such as the 'Tigeroo' and the 'Diobra'.

COMMENTS

Control keys: answers to be typed in and ENTERED. Cursor keys to guide car in safari game. CAPS SHIFT and Q for Parents page
Keyboard Play: very responsive
Use of colour: good
Graphics: good on the whole, though a couple of animals are tricky to identify
General rating: recommended. Children will enjoy it, and as the questions can be changed, the game represents good value for money. You can also load in science questions from a data tape (see following review)



SCIENCE

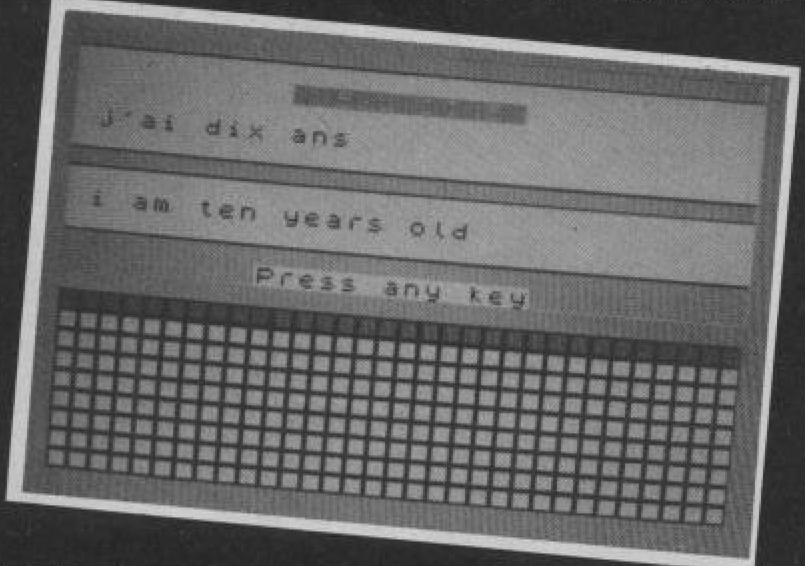
Producer: Argus Press Software
Memory required: **48K**
Retail price: **£5.95**
Writer: **Computertutor (Clever Clogs series)**
Age range: **5 to 9 years**

This is a science data pack for use with the other *Clever Clogs* programs — *Jungle Jumble, Whizz Quizz, Star Trucker* or *Blockbuster*. You load the main game as normal, press CAPS SHIFT and Q to get to the Parents Page, then load in the data of your choice. There are 6 sets of data to choose from, each set containing 100 questions: *Living world; Physical Sciences; Mathematics* and *General Science 1, 2 and 3. Living World*, for instance, contains questions such as 'We can move because of our 1) skin, 2) liver, 3) muscles?' and 'What makes bread rise? 1) air, 2) yeast, 3) mould'.

I used the questions with *Jungle Jumble*, but the data would be more suitable with a game like *Whizz Quiz* for slightly older children. The program would be a worthwhile addition to any of the *Clever Clogs* games mentioned above, both for use in the home and in schools.

FRENCH VOCABULARY

Producer: Rose Software
Memory required: **16/48K**
Retail price: **£6.95**
Age range: **aimed at 'O' Level pupils**



This French vocabulary package contains six short programs aimed at the 'O' Level pupil. The first three test knowledge on specific topics such as shopping, weather, the home and travel. The user can choose from several options, translating from English to French or vice versa and can opt to either key in the answer or just think it out!

The fourth program is the homework tester, which allows the user to type in words in order to test vocabulary, while programs 5 and 6 revise common expressions and irregular verbs respectively.

The main problem I found with the programs in this package is that they demand complete accuracy. In the section on personal descriptions, for example, the program will not accept the answers 'I am ten' or 'I am 10' as the translation for 'J'ai dix ans'. The only acceptable answer is 'I am ten years old'. Having said that, however, I am sure that the package will be of use to pupils studying for the 'O' Level examination, although I found it to be rather dull and repetitive — but studying for exams can be dull and repetitive at the best of times!

I doubt, though, that the incentives for achieving success in some of the programs (building a wall with the words 'Très bien' written on it, in one case) will have much appeal for fifteen or sixteen year old pupils!

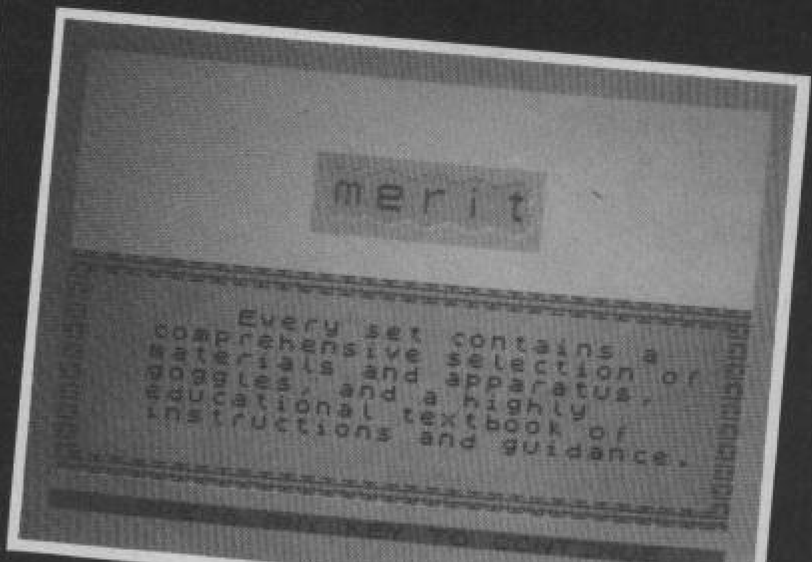
COMMENTS

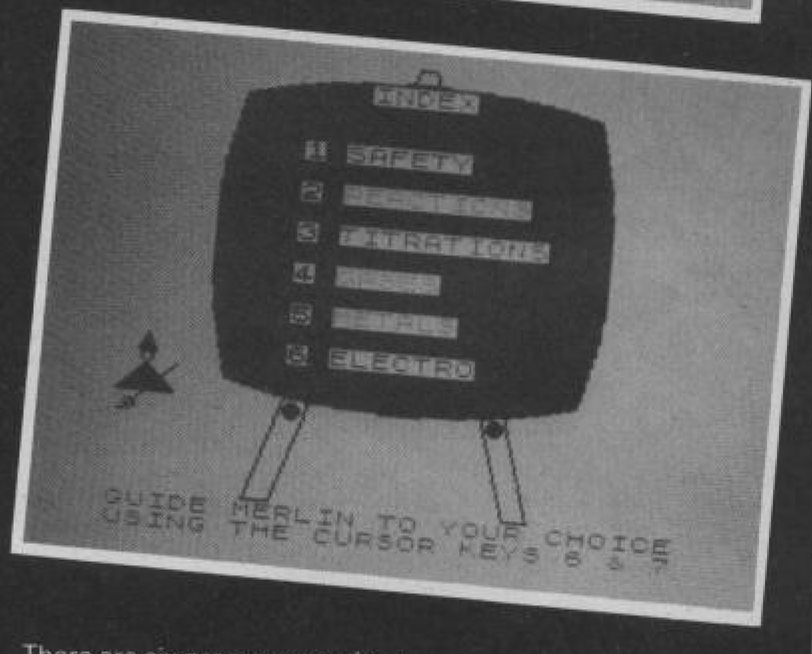
Control keys: answers are typed in with number keys being used to insert the various accents in the English to French options
Keyboard play: very slow
Use of colour: adequate
Graphics: reasonable
General rating: there is a place for this type of rote-learning package in exam revision, but although the six programs include a variety of topics, the presentation could have been more interesting. Also the programs crash if BREAK is inadvertently touched, which is a rather extreme approach to software protection!

CHEMISTRY

Producer: Merit/Cloud 9 Software
Memory required: **48K**
Retail price: **£3.45**
Age range: **up to 'O' Level**

The programs in this package have been designed specifically for use in conjunction with the *Merit* range of Chemistry sets — indeed without the *Merit* sets, the cassette would be of little value. I felt the packaging is rather misleading, as it does not make this point quite clear to the prospective purchaser.





There are six programs on the tape: *Introduction, Titration, Metals, Reactions, Gases* and *Electrochemistry*. The idea is that the user completes the relevant experiments using the *Merit* sets, reads a textbook for further information and works through the program to consolidate what has been learnt. Demonstrations, simulations of experiments, information databases and a few games are included in the package.

For home education purposes, I doubt that *Chemistry* will have much impact, but in the hands of an experienced teacher, the programs might be useful. The experiment simulations could never rival the excitement of actually participating in an experiment in the science lab, but of course that isn't the purpose of the package. Certainly, for revision purposes, the cassette would be quite useful, and some of the games are enjoyable to play, particularly the space adventure game which reinforces knowledge of metals, and the investigation game — *Inspector Kluedeau* — which is part of the section on gases.

COMMENTS

Control keys: clearly explained in each section
Keyboard play: fairly responsive
Use of colour: very good
Graphics: the simulation experiments are very well done
General rating: don't buy it for home use unless you have a Merit chemistry set! Budding young chemists, however, would probably find it very useful.

48K Spectrum

THE ARTIST



The ultimate?

"I can only label [The Artist] with that often misapplied adjective, 'ultimate'." B. Knight, Mortimer, Berks.

"Saturday. Just received 'The Artist.' It's now Monday, where did the weekend go?...truly superb." J. Hughes, Winterslow, Wilts.

Your Spectrum reviewed the best graphics packages for the Spectrum; Paintplus, Light Magic, Leonardo, and The Artist. The Artist won hands down with a 5/5 rating. It was judged the best in every category of testing: best UGD creator, fastest to use (2½ times faster than its closest rival Paintplus, and 6 times faster than Leonardo), easiest to use, outstanding airbrush effect and astounding facility to paint with patterns.

"Only The Artist has got it right."

"An amazingly complex screen took only half an hour to produce..."

"The FILL commands are wonderfully versatile..."

"...it has so many goodies that you're bound to find one that'll help you do exactly what you want."

"...advanced colour editor."

"Who needs a Macintosh when you've got a Spectrum and this program? All it needs is a mouse and you've saved yourself two grand!"

Your Spectrum, June 1985 issue.

The Artist is compatible with the Wafadrive, Microdrive and can be obtained for use with some disk drives (write for details).

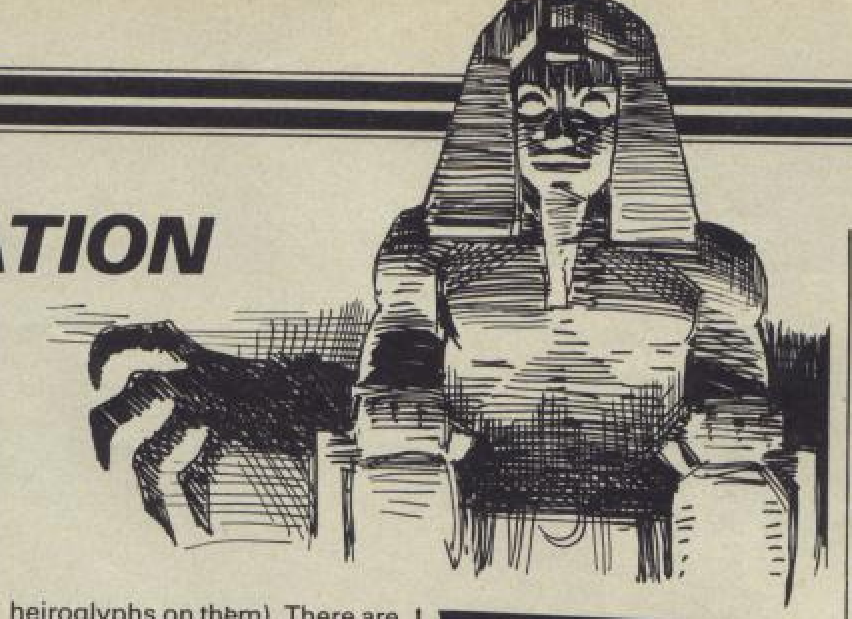
Equally ideal whether you simply wish to 'doodle', or whether you're an expert looking for a 'serious' graphics package on a home computer.

Quite simply, the ultimate graphics package for your Sinclair Spectrum.

SOFTECHNICS

12/13 Henrietta Street, Covent Garden, London WC2E 8LH Tel: 01-240 1422/7877 Telex: 892379 SOFTEK G

PROFANATION



Producer: Gremlin Graphics
Memory required: **48K**
Retail price: **£6.95**
Language: **machine code**
Author: **Victor Ruiz**

This is the second of the two Spanish games from Dinamic Soft to be released by Gremlin this month (the other being the boxing simulation, Rocco). It is, in its simplest form, a platform game cum arcade adventure. So why Profanation? Well, it's not that it might be blasphemous to buy or even play — there's nothing remotely immoral about it. Neither has it got anything to do with the fact that a few profanities will escape your lips during play. No, the profanity is the Pharoah's curse that has been inflicted upon our poor hero and intrepid explorer, Johnny Jones (*Pause for breath*) Gasp! Shock! Horror!

Yep, the highly inquisitive Johnny's gorn and got himself trapped in the Temple of Abu Simbel, erected over 3,000 years ago by Ramses II himself, no less. This temple wasn't the only thing left behind by the Pharoah (*cue Vince Price voiceover*) No, there was also the threat that an evil spell would be set upon anyone brave or foolhardy enough to enter the Pharoah's tomb! All the temple's secrets remained hidden from the curious eyes of humanity for over 30 centuries. That was, until JJ decided to take a look. Now he's been turned into a hideously deformed . . . well, **thing** is the best description I can think of (I don't think he looks so bad, in fact he's quite cute - he looks rather like an armless purple spud on legs, with a large nose and for some strange reason he's always smiling — obviously nose something we don't!).

So now JJ's in a mess, or rather a tomb. (*Cue tense muzak* . . .) Can JJ free himself from the spell and find his way to the mortuary chamber and discover its secrets . . . ? Well he can if he can get out of the first location!

The Temple itself consists of 45 chambers, each containing its own platform arrangement and particular group of nasties. Most of the nasties move in regular, predictable patterns while others are stationary problems such as spikes that shouldn't be fallen on. Other cosmetic things adorn the locations such as spider webs and skeletons. The screen flips to the next location on moving from chamber to chamber rather than scrolling.

Large slabs of stone are present in some locations, blocking further progress and they can only be moved by 'collecting' the correct 'keys' (touching small blocks with heiroglyphs on them). There are also a number of traps throughout the temple's 45 locations that are only noticable once you've fallen into one! You soon learn what's what. Deeper into the temple there's a large coloured diamond (I won't say what that's used for), deadly pools, stalactites that fall and crumble, snakes, mummies, a row of stepping stones over a river of pirhanas and some damn-near-impossible-to-negotiate Van der Graff generator thingies amongst a multitude of other objects.

Control is simple left/right movement with two heights of jump (depending on how far you need to safely leap) - a normal jump or an extra high one. You initially start with ten lives — believe me, you need 'em — and one is lost each time you hit something nasty, such as a deadly water drip, a spinning monolith or even some spikes for example (usually found in traps).

The instructions are deliberately sparse, giving only a brief scenario, the keys used and how to load the game (always useful). This is to allow you to find out things for yourself . . . well there are arcade adventure overtones, after all.

CRITICISM

● 'This is one hell of a difficult game to play, but one I didn't find too offputting because of it. The graphics are very good, the main character being humorously and well animated. I particularly like the way he looks innocently around if left standing doing nothing for a while. Other characters and objects are very well defined/animated and colour clash is very rare (even when it does occur it's rarely offensive). The title screen music wasn't bad, nor were the sound effects. Although *Profanation* doesn't offer anything outstandingly original in terms of gameplay, it does offer a tough challenge for it's price.'

● *'Ten lives, that's surely a generous helping . . . or is it? Well, if perhaps another zero was added, then it would feel about right. This is a pretty evil game, it's got lots of nasties in store to kill off the unwary adventurer. The graphics are great, they really give an authentic, spooky atmosphere. To compliment this, you are portrayed as a zany-looking creature. Abu Symbel is simply a brill game that is as hard as it is good. Its difficulties will frustrate you, while its charms will addict you. Not for the casual player: pro's only!'*

● 'Those of you who despise platform games will probably find yourself loathing this one as it is incredibly difficult and proves too frustrating to be worth playing for any great length of time. There's not a great deal new about it, with the usual monotonous left/right/jump stuff that is found in your average platform game. The graphics are the most appealing aspect of the whole game with some excellent sprites and a great use of colour all round. The sound wasn't too hot and the title screen music drove me up the wall. Still, any platform freaks who still enjoy this sort of thing will probably love it, but the rest of you shouldn't expect too much.'

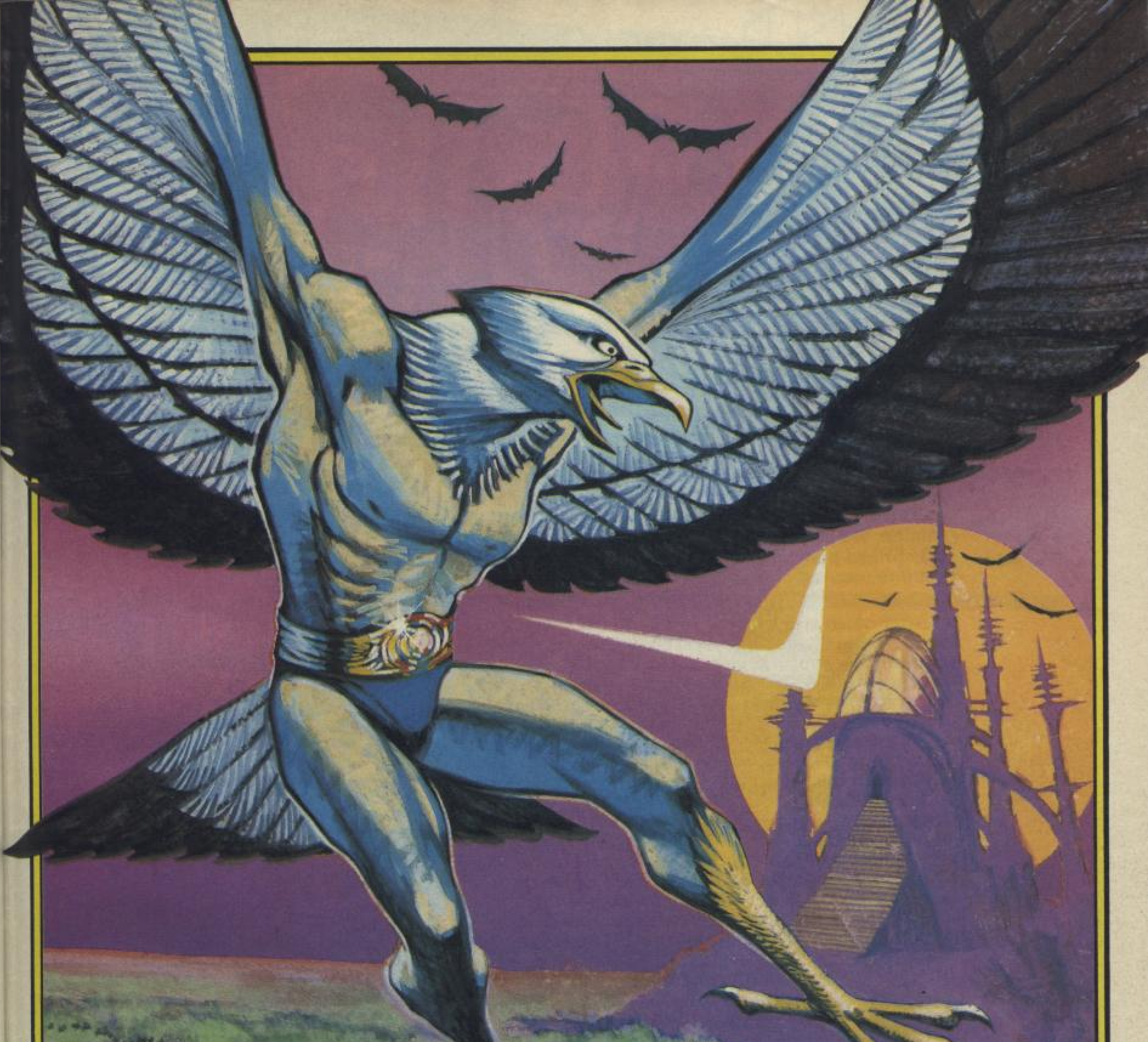
COMMENTS

Control keys: O/P left/right, Q-T/A-G high/low jump
Joystick: Kempston
Keyboard play: good
Use of colour: excellent
Graphics: very good
Sound: good
Skill levels: 1
Lives: 10
Screens: 45
General rating: a good but very difficult game, nothing outstanding though

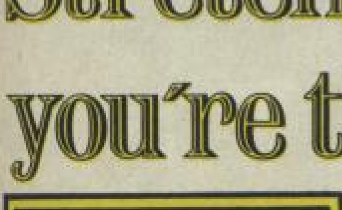
Use of computer	62%
Graphics	86%
Playability	75%
Getting started	54%
Addictive qualities	80%
Value for money	73%
Overall	**78%**

The first screen from PROFANATION. Inside Pharoh's pad, the quest begins.





Stretch your wings, steel your nerves.. you're the last hope for Mankind.



Before your eyes your friends, your family are rendered helpless, transformed to lesser beings – birds and mice – by the invading Kremins. But by a cruel twist of fate the transformation leaves you with the body of a bird but the brain of a human. You are the last chance the human race has left.



£6.95

METABOLIS

Spectrum 48K

Gremlin Graphics, Alpha House, 19 Carver Street, Sheffield S1 4FS. Tel: (0742) 753423

The World's First Add-on Subscription Offer!

Bring joy to your life, and a Joystick to your Spectrum with our Summertime Sub Offer!

Join The Communist Party and Meet Lenin! (Oops, wrong sub offer)

Buy a Year's Worth of CRASH and pick up a half-price Comcon

CRASH ZX SPECTRUM

That's enough captions, get on with the blurb — Ed

Another super-dooper offer to whet your appetite for a CRASH subscription, courtesy of the Marketing Minion. We have arranged a way for joystickless and CRASHless persons to put their lives in order, through a money-saving SUBSCRIPTION OFFER.

After much arm-twisting, nagging and general abuse, a Big Cheese from Frel Limited was persuaded to offer new subscribers to CRASH the opportunity to purchase a COMCON joystick interface at the for the super low, halved price of £10.00 as opposed to the normal £19.95.

The offer is only open to new subscribers, who sign up during the month of August. If you want to avail yourself of this offer, then whizz Auntie Carol Kinsey — known to her chums in Mail Order as 'Aggie' — a cheque for the normal subscription cost, £14.50, plus the ten pounds for the COMCON, making a grand total of £24.50. Not a bad deal. Depending on how you look at it, you're getting a year's worth of CRASH for £4.55 and a COMCON at full price, or saving a tenner on the usual price of the Joystick Interface voted 'Best Hardware Add-on' in the 1984 CRASH Readers Awards.

And if you're already a subscriber to our magazinipoos, don't despair! You can also make a killing by sending a cheque or postal order to Auntie Carol for £12.50 along with your subscriber code number, in return for which you'll be sent your very own COMCON in a personally addressed Jiffy Bag, lovingly stapled shut by Carol's own fair hands, and adorned with . . . (*That's enough —Ed*).

WHAT YOU GET IN CRASH

If you've been tuned into CRASH for some time, then reading this panel is a waste of your time which would be better spent filling out the form and licking that stamp.

If you haven't read CRASH before, then where have you been? do you own a Spectrum? are you an alien or what? If you haven't read CRASH before, then reading this panel would also be a waste of your time, which would be better spent looking at some of the other pages and realising what you have been missing. I mean, CRASH is not a computer mag — it's a way of life.

Anyway, as I can see you're determined to stick with the panel, here goes. Up to date reviews on the latest software, with opinions on the games formed by at least three young games players; the august presence of programmer Derek Brewster to look after adventure games and hints; the september presence of Strategist Angus Ryall (you've never heard of him? well neither have we, but this column keeps coming in every month so we print it); the june is bustin' out all over presence of Lloyd Mangram (1984 Cult of the Year Award), plus loads of prizeful competitions, news, playing tips, pages of letters, hi-scores, programmer and software house profiles, Tech Niche for the technically clever, Crash Course, maps, charts, gourmet food, haberdashery, expert advice on wines, motoring, horse racing and — well quite a few of those things anyway. Read the mag and find out for yourself.

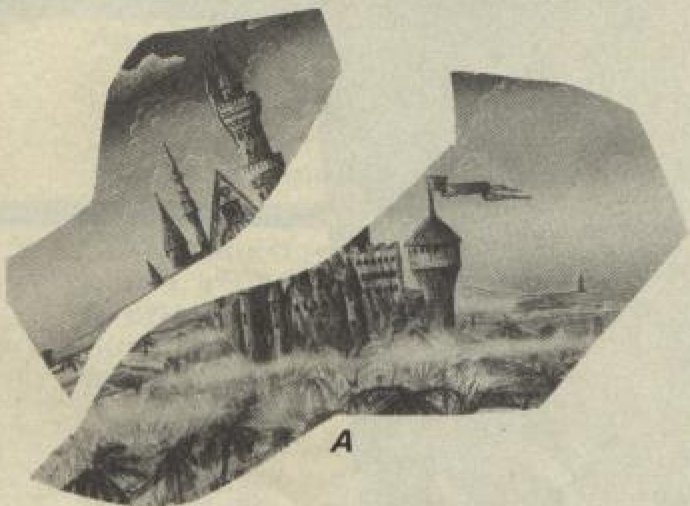



OMCON
e
face for
COMCON

BE ADVENTUROUS!

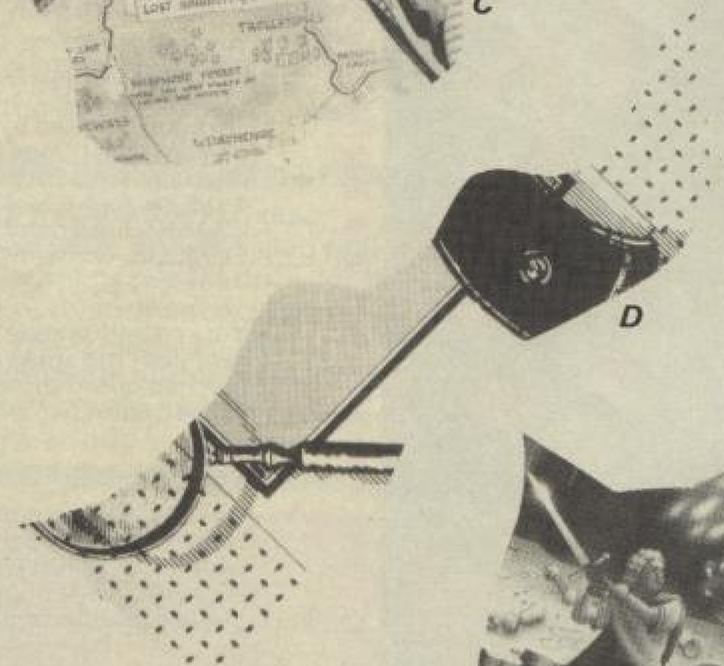
A chance to win some free software and T Shirts by applying your knowledge of adventure games.

SPOT THE ADVENTURE AND WIN A PRIZE!


A


B


C


D


E

Just for fun, here's a CRASH Quiz which give the adventure players amongst you the edge when it comes to working out the answers. The mad scalpel-wielders in the Art Department have taken their weapons to the packaging of five well-known adventure games for the Spectrum, and lopped bits off them.

If you reckon you're a bit of a smartie when it comes to adventures, (no, fools, not a little round lump of chocolate with a sugar coating — perhaps you'd better give up RIGHT NOW), if you reckon you can identify an adventure game cover at fifty paces in a snowstorm.....here's your chance to cash in.

What you need to do is identify the games from the bits of cover printed here and jot down their names on a bit of paper or postcard together with your address and whizz it to AUGUST CRASH QUIZ, PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB to arrive by 29th August. First three correct solutions out of the boot of Jeremy's Morgan on that day win £25 worth of software of their choice plus a CRASH T Shirt, and three runners up will have to make do with a CRASH T Shirt nestling on its own in a lovingly hand-crafted padded envelope.

QUIZ



WINNERS WINNERS WINNERS

Sean Stephenson has been in touch, with a mini-thesis on CRASH competitions. He points out that there are three kinds of CRASH Comp — and he is wondering how many people enter the different competitions: 'How much chance do I stand of winning?', he writes, 'I am beginning to think, as many other readers probably are, that there is no point in entering your competitions because it is a waste of stamp money'.

OH HE OF LITTLE FAITH! Here I am, slaving away, sorting out lots and lots of prizes for you lot to win, and then this fellow writes in muttering about wasting stamp money! How dare he. One measely stamp is all you need to enter every competition in an issue of the magazine, a mere 17 pee if you put each entry in a separate envelope and then put all your competition entries in one envelope marked MULTIPLE ENTRIES. A waste of stamp money indeed. And if things are really bad, you could always squander 13 pee on a second class stamp!

Six competitions on average, in each issue. Several hundred prizes up for grabs every month — all you need is a bit of luck and some skill, and you could walk away with a copy of the latest game . . . some hardware . . . T-Shirts . . . all sorts of things. The odds are pretty good, all things considered - you're probably facing odds of a couple of hundred to one each month if you enter all the competitions, and if you invest less than twenty pence a month for a whole year, then you could end up spending £2.50 - a budget game's worth of loot — and be in with a twenty or thirty to one chance of winning at least one prize.

Anyway, enough maths. Kind regards to Mr Gaz Sumpter who offered to Hoover El Corpulento's Morgan for me while I washed it every Monday, but our Jeremy is very fussy about who he lets near his motor . . . only the very best minions are allowed to work for our Software editor. And I expect that Graeme Kidd fellow will start handing out a tough time, now Roger Kean has moved on. It's time I joined a union.

On with the results.

JACK IN MAGICLAND COMPETITION

Fifty copies of **Turtle**'s *Jack in Magicland* go whizzing off (one each, one each) to:

Philip Anderson, Hollins Cres, HG1 2JG; Anon, Chestnut Lane, HP6 6EN; Alexander Baker, Meadow Cottage, CB3 7SY; Andrew Barber Cagefield Road, SS4 2BE; M Beaumont, St Andrews Drive, WF11 8PX; Paul Burns, Cypress Grove, 5QW; Daniel Campbell, Warbreck Hill Road, FY2 0TR; James Close, Clifton Road, Derby; Michael Cook Ladysmith Road, EN1 3AQ; Merlin Cox, St Marys Walk, SE11 4UA; Kevin Crabb, Wessex Road, BH14 8BQ; Stephen Cutts, Park Crescent, HX3 5EL; A Davies, Rugby Avenue, SA11 1YT; Garry Davison, Eton Drive, DN17; R Handforth, Brown & Root Ltd, SW19; Alan Hourimane, Merton Road, WN3 6AQ; Cari Isherwood, Springfield Street, West Glamorgan; Jock, Kender House, SW7; S Kedwards, Cheswood Drive, B76 8XU; Dave Kelly, Porthill Road, SY3 8RN; James Macnab, Harvey Terrace, PA12 4HB; M Main, Pelegarth, NE61 5JY; J Malone, Greenwood Drive, E4 9HL; James Martin, Leaches Farm, EX18 7HH; Neil McDowall, Ashfield House, SP2 7EG; Norman McLaughlin, Carnlea Road, BT43 6TS; Paul Mcleish, Taunton Avenue, WN7 5PT; Anne Menneer, Nanpusker Road, TR27 5JR; Chris Moss, Goodmans Lane, CO6 1NE; Robert Norton, Paget Road, WV6 0DX; Stephen Nye, Nunney Road, BA11 4LD; B Oakes, College Road, Rugby; Tolkien Osborn, Alleyn Road, SE21 8AT; David Payne, Crofts End, OX11 0SA; J Riddell, Albany Drive, CT6 8SJ; Richard Rooke, Overdale Crescent, M31 3GR; D Rose, Marlwood, NG12 3NS; Mark Rose, Newberries Avenue, WD7 7ES; Andrew Rumsby, Lanyon Road, TR3 6HF; Jason Russell, Rowan Drive, RH14 9NE; Adrian Samler, Elderfield Cres, OX11 0RY; Bryan Scott, Beech Grove, NE9 7RD; Viv Shadbolt, Beechwood Avenue, SG8 6BQ; M Shepherd, Andersey Way, OX14 5NW; Susie Tinkler, Babingley Drive, LE4 0HH; Marcus Tyler-Moore, Speedwell Way, RH12 4WA; Daniel Wilson, The New House, CM23 1HX; Grant Wilson, Windsor Drive, YO3 8RZ.

GRAND NATIONAL COMP

Elite's competition for their Horse Racing game *Grand National* attracted a bumper crop of entries — knowledgeable bunch of people you are. How many CRASH readers take **SPORTING LIFE** every day? I am left wondering. Anyway, here's the twenty five winners who will soon receive their **Elite** Six Pack:

Craig Aldred, Windy Ridge, NR29 5DR; Anthony Bailey, Woodstock Road, SM5 3DZ; L Barnshaw, Brookfield Avenue, WR7 5RE; Graham Bentley, Cordery Road, LE5 6DB; Nigel Cook, Highcroft Avenue, West Midlands; G Dawson, Greville Road, CV8 1EL; Mrs Dimmock, Kingsfold, Milton Keynes; Joseph Fyfe, Inveresk Street, G32 6QN; Damian Garside, Huddersfield Road, West Yorks; Jamie Gordon, Watton Cottage, SG14 3RB; Chris Hopkins, Heathcote Road, BS16 4DL; Matthew Levett, Sunstar Lane, BN26 5HS; Barry Mansfield, Dromore, DA14 6AN; Tony Meadwell, Offa Road, MK42 9HZ; David Payne, Craftsend, OX11 0SA; Simon Poluck, Castle Drive, IG4 5AE; Chris Robinson, Tuart Street, DH3 3EN; Scott Rudden, Burnfoot Road, TD9 8EJ; Ian Seymoor, Queens Road, DN6 0LU; Edward Sherwood, Cleveland Road, West Yorks; Paul Smith, Rushetts Road, RH2 7RQ; Trevor Stockwell, Stone Street, RG3 1HU; Paul Taylor, Cherwell Grove, RM15 6AS, R Whitton, Brook House, Brook Lane, Whitby; Alex Wing, Bonnetts Lane, PE14 8JE.

CONFUZION COMPETITION

Forty smashing Sweatshirts, supplied by **Incentive Software** are already in the post to the following little block movers:

Ian Armstrong, Wolsingham Drive, TS5 8JU; K Bly, Alpine Rise, CV3 6NR; S Brooks, University College, Cardiff; I Brown, Woodford Close, NG5 5BW; Anthony Chapple, Whitewells Road, BA1 6NZ; Jeremy Connor, Buxton Close, Tyne & Wear, NE28; P Cooke, Bleak Hill Road, B23 7BN; Derek Cooper, Granville Road, LA1 2PA; Kenneth Dowson, Marjory Road, PA4 8BG; Mike Dunn, Poyner Road, SY8 1QT; Robert Graham, Rotherwick Road, NW11 7DG; Stephen Graham, Green Lane, CA2 7QB; David Griffiths, Bolton Road, Nr Wigan; K Grzesik, Chesterfield Road, S18 0RG; Paul Gyles, Holly Close, PE30 3JH; Wilson Hayhurst, Fell End Farm, LA7 7BW; Ian Hunt, Old Lodge Lane, CR2 4AN; N Johnson, Somercotes, SS15 5UQ; R Jones, Corbett Square, LL36 9DF; Ken Jones, Verity View, LS9 0EE; Oscar Levcovich, Spaetteves 111th, Denmark; S Lowry, Eastern Way, Newcastle Upon Tyne; Keith Macaulay, The Gables, AB5 0TT; Cormac McGuinness, Greggates, Co Dublin; S Mitchell, Munnings Close, RG21 3EH; Chris Nash, Tyndale Gardens, B43 7NR; R Norfolk, Grays Close, ST7 3LU; Ian Pullen, Lyncroft Avenue, DE5 3BB; Robert Savage, Crowland Road, CB9 9LF; Trevor Shelley, Tees Street, TS13 4LW; Andrew Sillars, Gorse Crescent, ME20 6ER; Alan Stevens, Badger Road, S13 7TX; A Szebeni, Haydn Avenue, CR2 4AJ; Thomas Todd, Surrey Close, NE63 8PG; Peter Tong, Rue Des Belles Feuilles, Paris, France; Matthew Waddington, Black Moor Road, BD2; Simon Wilkinson, Gringley Road, DN10 4AP.

MINI OFFICE COMP

The *Mini Office* competition, in which one hundred copies of **Database**'s super dooper office efficiency program was on offer attracted a mega boxful of entries. Seems you don't want to end up like whot us lat at CRASH hav. . . .

Munawwar Ahmad, Taunton Ave, TW3 4AG; Robert Aitken, Erithway Road, CV3 6JU; Geoffrey Allard, The Kent, CV21 4NG; Nick Ayre, Ringwood Close, Leicester; K Balshaw, Abberley Close, WA10 2AZ; G Banyard, Gilbert Road, CB6 1JZ; Gordon Barham, Lyndhurst Parade, BT13 3PB; Robert Barnard, Cavalry Crescent, BN20 8RN; Jann Barnett, Stoodley Close, OL14 6HY; Ian Benzie, Chalgrove Field, SN5 8QA; Mark Bittorf, Highfield Road, Kent; David Blair, Inchview Gardens, KY11 5SA; Steve Blanks, Elmside, Surrey; Mr R Booty, Wembley Avenue, BN15 9JZ; E J Bowen-Humphries, Radnor Road, CF5 1RB; Chris Bowler, Beaumont Close, DE7 1HQ; Mark Burn, Thomas St South, SR2 0P; Stephen Cheesman, Morven St; James Clifford, Borthwick St, G33 3UT; John Clifton, Kidbrooke Grove, SE3 0PG; A Coleman, Manilla Road, B29 7PZ; Jerome Collins, Orchard Caravan Park, Norfolk; D Corton, Reuldge Road, BB1 8DJ; Mike Dench, Longwood Road, Herts; J D Doggett, The Drive, EN6 2AP; Mark Dornan, St Marys Road, Dorset; Patrick Draper, Norvic Drive, NR4 7NN, D Drummond, Hyacinth Close, CO16 7DG; Laurence Dufty, Thatchers Green, WR9 9EB; Philip Dutton, Hazlewood Meadow, CT13 0AP; Melanie Easy, Somerwell Road, HA2 8TZ; M Edwards, St Nicholas Drive, TW17 9LD; P A Fairless, Wreay Walk, NE23 6LJ; Neil Gallighan, Crown Stores, Channel Isles; Keith Giscombe, Shire Way, WR9 7RQ; Antony Greenwood, Richmond Road, S61 2JX; D Griffin, Fairfield Road, B61 9JW; Andrew Griss, Lanercost Way, IP2 9DP; Andrew Hague, Inglewood, Cheshire; Ian Hamley, Wimperis Way, Birmingham; Mrs Hanmore, Queens Road, PO36 8DT; T S Harding, Winchester Rd, BS4 3NF; Timy Hav, Girdwood Road, SW18 5QR; Barry Hunt, Hornedale Avenue, LA13 9AS; Alaid Hussain, Walpole Road, E17 6PS; S Jenkinson, Kingsley Park, RG28 7HA; Andrew Jolly, Sackville Street, PR6 0LF; K Jones, New Road, BR8 7LS; S Jones, Adelaide Street, DH3 3HY; S T Kelly, Stamperland Ave, G76 8HA; Jason King, Brook House, EX22 7DH; Grahame Kirsopp, Argyle Crescent, EH15 2QE; Warwick Laung, Princes Square, Hove; Matthew Lawless, Sprucedale Gdns, SM6 9LB; Neil Layton, The Peacheries, PO19 2NP; B Lever, Lower Fold, Cheshire; Ms Romayne Lynn, Demesne Avenue, BT18 9L; Nicholas Marsat, Daven Road, CW12 3RB; Mr D Martin, Munster Gardens, N13 5DT; A Matthews, Capmartin Road, CV6 3FW; Alistair May, Institution Road, IV30 1QT; Andrew McGilvray, Driftwood, RH5 5LF; Tony Meadwell, Offa Road, MK42 9HZ; Stuart Millinship, Graveney Gdns, NG5 6QW; James Norwood, Gambier Parry Gardens, GL2 9RD; Tony O'Keeffe, Somercotes, SS15 5UB; Ian Oxberry, Canterbury Road, Tyne and Wear; Russel Pearson, North Drive, FY5 3RD; E D Pettit, Lichfield Road, DT4 0HE; J Pollard, Mincing Lake Road, Exeter; Mrs J Pritchard, Sylvana Close, UB10 0BH; Ms Sam Proctor, Meadow Cottage, Green Lane, B80 7EY, Andy Reason, Westfield Grove, BA21 3DN; Ms T Reynolds, Jannys Close, Norwich; P J Ryder, Ludlow Road, Worcs; A M Savidis, Briarfield Close, BD10 8QP; M S Shepherd, Andersley Way, OX14 5NW; Graham Smart, Sandham Close, PO36 9DS; Colin Smith, Brandenburger Weg 3, 8070, West Germany; Chris Sollit, Staithe Road, PE13 3TG; Andrew Sturdy, Barrett Road, DL3 8LA; Steven Tait, Prospecthill Road, G42; Kevin Ternent, Broom Hill, PL12 4DZ; Matthew Thomas, Whitton Dene, TW7 7NJ; Leon Thompson, Victoria Road, PO30 2HB; J Thompson, Tor Croft, Sheffield; Michael Trinder, South Bramble, Berks; William Van Rest, Hanbury Road, B93 8DN; Messers Vikas, Eight Acre, Manchester; David Walker, Moredun Park View, Edinburgh; Andrew Wanless, Knowlands, SN6 7NB; Jon Ward, River View, SS5 6LP; David Webb, Sunte Avenue, RH16 2AA; Jason Wesley,

WINNERS WINNERS WINNERS

Causeway Street, South Wales; Philip Whichello, Priests Lane, CM15 8LE; Robert Whitby, Tree Tops, BR4 9DS; S Wilks, Driveways, Gloucs; Matthew Williamson, Erpingham Road, SW15; Daniel Wilson, The New House, Farnham; Michael Wrench, Worthing Street, CW9 7BS.

VULCAN JOYSTICK COMPETITION

The chaps and chapesses behind the VULCAN Custom Joystick competition were so impressed by the standard of the entries we received, that they decided to add to the prizes! As a result the ten lucky winners will probably have already received their **Gunshot 1** joystick together with a programmable interface.

Nice people eh? And of course, the ten winners were:

Richard Wright, Hall Road, Burton on Trent DE13 9BX; Robert Norton, Paget Road, WV6 0DX; R Hunter, High Street, NG32 1JB; D Payne, Alma Road EN3 7RT; I F McAuliffe, West Common Grove, AL5 5LL; Matthew Williams, Trafford Road, OX3 8BD; G A Cross, Knowle Road, B11 3AJ; Geraint Letherby, Glyn Gwyn Street, CF45 3AF; R F Bardie, Warncombe lane, EX16 4NZ; and Stephen Graham, Green Lane, CA2 7QB

KOMPLEX COMPETITION

A good time was had by all, hunting round the pages of CRASH, looking for the seven selected sentences — and an awful lot of you must read the magazine very closely indeed, judging by the number of correct entries we received. Anyway, on the with the real meaty bit — 'Oo Won What:

James Kirkpatrick, Roebuck Road, KT9 1JY is the recipient of the first prize package — an Interface One, Microdrive, Komplex T Shirt and a copy of Komplex City (when it's ready).

Tom Holstein, of Kennet Way, RG23 7AA; Robin Law of Queen Margaret's Rd, CV4 8FW; John Slater of Goldsmith Avenue, CV34 6JB and Richard Anderson, Kincora Avenue, Belfast, BT4 3DW all win a copy of Komplex City to go with the Komplex T Shirts while the following people will soon able to stun their friends by wearing their Komplex T Shirts while at work and play....

Michael Ashley, Chestnut Avenue, PO9 3QR; Derek Buckle, Epsom Drive, IP1 6SS; Christopher Chapman, Baldock Road, SG6 3JX; Chris Crane, Constance Avenue, ST4 8TE; Melanie Easy, Somerwell Road, HA1 8TZ; A Ellis, Park Avenue, Nottinghamshire; B S Frankel, Alexandra Road, E17; N Johnson, Somercotes, SS15 5UQ; Craig Lemon, Mountbatten Road, CM7 6TP; Simon Lewington, Woodbine Cottage, GL6 8EP; James McMullen, Woodview, IRELAND; Iain Mantle, Wye Close, CV32; Rupert Murdoch (shurely not THE RM?), Tracy Close, NG9 3HW; Bernard Oattes, Autumn Close, RG4 8UL; W J Platt, Rockfields, CF36 3NS; Trevor Shelley, Tees Street, TS13 4LW; Michael Slater, Wood Top, BL0 9EN; Michael Smith, Prescott Walk, M34 1RH; Andrew Thake, Boyd Close, CM23 5EG; Paul Wadsworth, Lewis Court, DA11 7EA; G K Woods, Scotforth Road, LA1 4ST.

WINNERS OF BUBBLE BUS TWO - WIZARD's LAIR HIGH SCORE CHALLENGE

Well well, my lovlies. Even though I told you that Steve Crow, the man who actually programmed the game *Wizard's Lair* had written us a score validator program to check your high-score entries, a couple of you still tried to cheat. As far as we're concerned the people whose high scores weren't accepted by Steve's program are disqualified and were most probably trying it on. No prizes for you, Messrs Winder, Keyhoe, Feven, Rackham and Ainge. So there.

Outright winner of the framed artwork used for the *Wizards Lair* cassette inlay with a high score of 236,145 is an **A F Slater** of Newborough, Cambridgeshire and this person also grabs a T Shirt and a copy of *Hustler*. Runners up are as follows....

Colin Mann, Quarryknowle, Bankhead; Bryan O'Rourke Ladysmith Street, Ullapool; J McCague Kenpas Highway, CV3 6PA; R McConnel Eyre Street, CF2 2JT; T M Bailey Aspen Lane, Middlesex; Martin Allen, Fernwood House, Melton; Ian Hunt, Old Lodge Lane, CR2 4AN; Mrs H Cook, Cliffe Avenue, CT9 5DU; Paul Rosbotham, Elstead Grove, WN4 0RJ; D Craig, Famet Gardens, CR2 5AL; T M Bailey, Aspen Lane, Northolt; Simon Hawcroft, Wentworth St, S71 1JW; D Smart, Warners End, HP1 2QG; Neil McDowall, Ashfield House, SP2 7EG; Daniel Castles, Holland Close, RH1 1HT; Andrew Todd, Croft Close, YO4 3JU; Marc Chapman, Sylvan Close, Morpeth; Anon, Horseshoe Cottage, Penzance, TR20; Lee Maynard, Sycamore Close, Crawley.

VOTING FOR THE ADVENTURE CHART

The CRASH Adventure Chart has picked up considerably since we first introduced it, with more and more votes coming in every day! To make life easier for sorting, we are now providing a separate write-in form, so please use it for the Adventure Chart, and not the one included at the bottom of the Hotline details. If you are voting on both charts, you may send both forms together in the same envelope of course.

How to register your votes

There seems to have been some confusion in the minds of voters for the Adventure Chart, so to clarify the situations, here's how we do it. You may vote for **as many titles as you wish** (not just five as in the Hotline Chart) and you may award any of them points out of ten. So, for instance, you might vote for seven titles giving each of them ten points if you think they are worth it, or only three and give them one each. These votes are then added up for each title and the total is divided by the number of people who voted for the program resulting in an aggregate figure. From these figures, the top thirty adventure games are taken in descending order.

Phoned-in votes are accepted over the Hotline **(0584 3015)** in the same way (please state that you are voting for the Adventure Chart at the beginning), and may also be written in letter form without the use of the coupon if you prefer.

Adventure Chart Prize Draw

And don't forget that, like the Hotline Chart, you can win prizes! Each month we draw a winner from the voters, who receives £40 worth of software and a CRASH T-shirt, with four runners-up each getting a T-shirt and a mini-subscription to CRASH for three months.

ADVENTURE CHART COUPON

Remember – points out of ten for as many titles as you wish.

Name ....

Address ....

....

postcode

Send your coupon to: **CRASH ADVENTURE TRAIL, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB**

CRASH HOTLINE WRITE IN COUPON
Please use block capitals and write clearly!

Name ....

Address ....

....

Postcode ....

Send your coupon to: **CRASH HOTLINE, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB**

My top five favourite programs in descending order are:

TITLE	PRODUCER
1	
2	
3	
4	
5	

Minson, Minson on the wall, who's the fairest of them all? Well before Robert Maxwell and Sir Clive came to their arrangement, we despatched the intrepid journalist and playwright John Minson to MIRRORSOFT'S headquarters in London to find out what was going on in Robert Maxwell's Software publishing company. It's not all educational programming — DYNAMITE DAN has just been awarded a CRASH SMASH. . . .

LOOKING BEHIND THE MIRROR

Not every publisher of educational software can boast as high a profile as **Mirrorsoft**, but then again few software houses belong to organisations as large as **Mirror Group Newspapers**. Jim Mackonochie, their development manager, is the man responsible for bringing the **Mr Men** and others to the micro, and when I met him recently my first question was how he had brought a newspaper publisher into the software market. He explained that it was a logical progression:

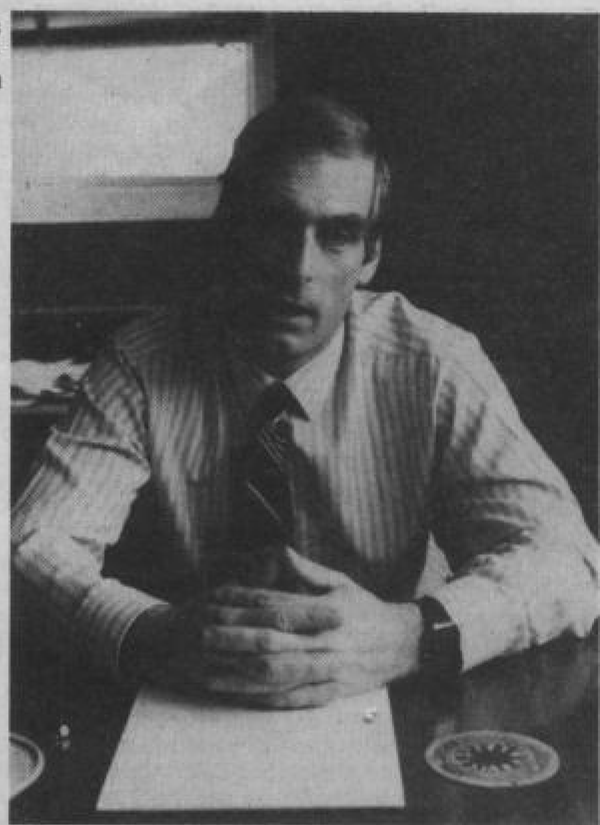
'In June 1983 it became apparent to me that the way technology was moving was that by the 1990s most homes would have a terminal, based on a home computer. We're basically a communication company, and it was essential for our long term objectives, moving to the turn of the century, that the Mirror Group Newspapers had an association with the home computer software market — not necessarily for what it was in 1983 or even 1984 but for what it's going to develop into by 1990.'

However there was a vast gap between the new technology of Fleet Street's electronic information gathering and the humble Spectrum, so why go for an in initial position primarily in educational and serious material? The option in mid-'83 was between going into games and having a major buying-up spree, or again looking to the future.

'Games will always be important in the market but it's going to start shifting in the next five years and education will become more important. When more powerful computers are in the home, serious applications will start coming to the fore, so a cold decision was taken — "Let's build up our strength in the early learning section of the market to begin with." '

From the start Mirrorsoft were able to draw on the resources of the parent group. Roger Hargreaves' Mr Men, who appear in a daily strip cartoon in the **Mirror**, are unquestionably popular with the junior school age group. *'Characterisation can go in fads but the Mr Men are proven over a number of generations of youngsters. If the Mr Men characters can be used in the software effectively it makes sense to use them. The trap we assiduously try to avoid is saying, "we have the Mr Men characters; how can we create a program to use them?" We prefer to have a sound programming concept and if we can use the Mr Men on that storyboard, we'll do it.'*

Jim Mackonochie, Mirrorsoft's main man poses for Ace Lensperson, John Minson



'I enjoy playing games. I enjoy using computers. It's more than a job - it's a little bit of a crusade element.'

When a decision was made to provide an introduction to directions, the result was **Here and There with the Mr Men**, replacing the Logo turtle with the cartoon characters. The Logo similarity hasn't been pushed in public, but schools in which the program was tested recognised it immediately and commented favourably. As yet there are no plans for the Mirror's other cartoon characters, such as **The Perishers** or **The Fosdyke Saga**, to make their micro-chip debut though.

Mirrorsoft have tried to cover a broad range of topics, with adult education, games and creative computing for a range of machines. While Jim Mackonochie admits that their current strength is in early learning, this year should see reinforcement in other areas. Recently two new games have appeared, aimed at the undertens market who can't yet cope with the complexity of **Knight Lore**'. **Phineas Frog** and **Ancient Quests** are both arcade adventures, but with learning undertones. First impressions of the latter indicate that it should keep the intended age range entertained. Jim firmly believes that adventure simulation is the best way to bring creativity into this market.

Ideas come to Mirrorsoft in a variety of ways, from basic concepts to a finished program in the case of **Caesar the Cat**. There are also in-house creative meetings which can result in communications from development teams. One long standing collabor-

A WHISTLE-STOP TOUR OF

In course of which Mr Minson's Spectrum attempts to educate him, and susses out his depravity

But of course Mr Mackonochie's crusade isn't worth anything if the product is of poor quality, so I left Mirrorsoft's Holborn Circus HQ with a selection of their programs, aimed at both young and old, put my reviewer's hat on (*vital piece of equipment in the Minson wardrobe — Ed.*) and scrutinised the Mirrorsoftware.

Look Sharp consists of two tests of visual skills for the 4 - 7 and upwards age group. Graphics are pleasing and 'SORT' is particularly fun, being the 'Spare Observer Recruitment Test'. The player has to spot the differences and remember just what they have seen before they qualify for the mission.

More down to earth problems with **Word Games With the Mr Men**, which tackles early reading. Once again **Widgit Software** have provided an amusing and well implemented program, the success of which lies in the amusing on-screen reactions that result from typing in a word. In the second game of the two **Mr Bounce** lives up to his name, and positively bounds all over the screen.

Caesar's Travels is a conversion from the Commodore 64 and revives the feline protagonist of one of Mirrorsoft's earliest game successes. It's an interesting adventure variation, with Caesar searching for a new home. The child makes a decision at crucial points, such as whether Caesar should 'Run' or 'Hide', and as these are almost all single key inputs many children could play alone. The end result is like an interactive bedtime story with accompanying animation.

One of the things that marks out the **Early Learning** series is how well error trapped and child-proofed they are. Sadly the same cannot be said about the earlier **Home Discovery** offerings. The first three have several ragged edges, such as 'Stop' messages and unprotected Basic.



The title screen from the Home Discovery series, a dinky little house displayed on the screen — what will you find inside your Psi-Q?



The Mr Men play word association football. Fun for the five to eight year olds.

'Know Yourself' is a good rule and **Know Your Own Personality** aims to help you do just that. Its three questionnaires are specially designed to evaluate key areas of character. (After my Spectrum had analysed my inputs it refused to speak to me for a week!) The companion program for the more mystically minded is **Know Your Own Psi-Q**, which contains a similar questionnaire on one side, while its main part consists of a series of precognition and clairvoyance tests, with facilities to chart your progress over a length of time. There's even a routine to aid relaxation and hence susceptibility to ESP.

While these two are usable despite their messy edges, **BBC**

LOOKING BEHIND THE MIRROR

ation has been with Ivan Berg Software who have been responsible for most of the **Home Discovery** titles. These include **Know Your Own Personality** and the **Joffe Plan** diet program, aimed at the broad (no pun intended) adult market. Jim agrees that they reflect the mass-market popular approach of the group's papers.

'All the market surveys showed that the main users of home computers were in the 12 - 17 year old age group, who primarily used them for games. We thought, there are all these Spectrum computers in homes - let's see if we can produce a range of software which may not necessarily have mass market appeal. There will be parents who'll be interested in looking at a diet program, or software such as **Starseeker** *which is particularly relevant this year with Halley's Comet coming through.*

'It was a calculated decision to build up a reputation for producing entertaining software for adults. But it's an error to have too high expectations of this market. If you're looking for the long term you have to recognise it's a very young industry and the non-games market is a minority area. One has to build up a reputation and not go mad overplaying it. It's a long-term market with a long shelf-life. If you promote over a long time you generate sales.'

In the case of **Know Your Own Psi-Q** and **Personality** the basic idea comes from the successful books by Hans Eysenck with Carl Sargent for the former, Glenn Wilson for the latter. The computer versions avoid the tedium of scoring, and more importantly remove the temptation to cheat — some questions are repeated to test consistency! In all of these programs, the authors have not just lent their names to the product, but have been closely involved with the development of the software.

Mirrorsoft have also used the group's resources to ensure high standards of presentation, conscious of the fact that their image reflects back on the image of the newspapers in the group. They've drawn on the journalistic talents contained within the organisation to produce properly edited documentation. *'Voluminous manuals that are badly written just turn everybody off the product,'* is their maxim.

As the group was created with the future in mind I wondered what lies ahead. Of course the Mr Men will be back later this year with more animation and arcade adventure elements, and there are also plans for in-house programmers as part of general expansion, but the real excitement lies in the coming generation of computers. Jim looks forward to an increased use of disks, though he admits that there could be problems of response time when interacting with microdrives.

It's when Mirrorsoft is seen as part of the mighty Pergamon/BPCC/MGN Corporation that things really happen. Robert Maxwell, chief executive of the empire, takes a great interest in the technological revolution and the family of companies of which Mirrorsoft is a part includes information services with massive databases and the Rediffusion cable network. As Jim Mackonochie says, *'The implications for the next decade are very interesting. There's some very interesting potential'*.

It's quite a relief to come down to the individual level again and find that Jim himself began computing with a ZX81 and now has a Spectrum, QL and BBC at home. His knowledge and enjoyment of games goes beyond mere business awareness. *'I enjoy playing games. I enjoy using computers. It's more than a job - it's a little bit of a crusade element.'*

Shortly after this interview was conducted, Robert Maxwell's involvement in Sinclair Research was announced. No doubt there will be a number of ramifications for Mirrosoft as a result — will they become another Psion? Are they going to preserve their independence fiercely?

Answers to these and other questions had not been obtained as these pages were prepared for the printers, not least because Mirrosoft were in the middle of moving premises. Cast an eye over the NEWS INPUT pages for an update on the position.

F THE PRODUCT



Caesar the cat goes walkabout, looking for a new home. He should try Ludlow!

Mastermind is sadly fatally flawed. Based closely on the television quiz, and recreating its inquisitorial atmosphere so well that you can almost hear Magnus Magnusson reading out your passes, it fails because the auto-repeat of the keys has not been disabled, resulting in too much of your two minutes being wasted in erasing duplicated letters. There's also a friendly and easy to use **BBC Mastermind Quizmaster** to generate your own databases, but the whole package cannot be recommended.



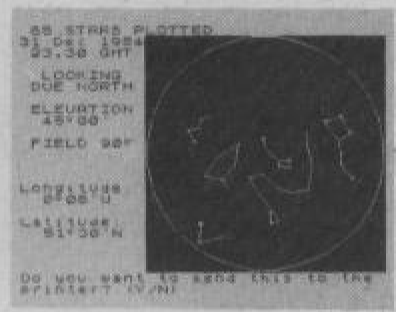
'Your Starter For Ten' oops, sorry wrong programme. 'I've started this caption so I'll finish . . .' Mirrorsoft's implementation of Mastermind

Happily the most recent addition to the series, **Star Seeker**, is much slicker; in fact it's just about the best astronomy program I've ever seen, but so it should be as it was written with the co-operation of the London Planetarium. One side of the tape deals with the stars, the other with our Solar System and Halley's Comet. It's simplicity itself to use and should be of interest to all amateur stargazers.

On the whole then, Mirrorsoft maintains high quality in an area where bad programming too often rules. With the proviso that some of the Ivan Berg programs lack polish there's a pleasing professionalism about the company. Recently Mirrorsoft



The night is not just for sleeping, you know. Lots of twinkly things appear. No more wondering what that little star is, with Star Seeker.



Constellations a-go-go, with 65 stars showing on the plot. On a cloudy night you can't see any of them.



A Day in the Life of the Moon. 15th January 1985, when it was 5.2 days old (that month). If you weren't star gazing that night, this is what it looked like!

have revealed growing interest in the games scene with **Dynamite Dan**, a platform game which was reviewed last issue and achieved CRASH SMASH status. They may also be taking over promotion of Games Workshop's Runestone, another CRASH SMASH, now that its originators have decided to cut back on computer involvement. All of which could result in Holborn Circus being just as famous for software as it now is for newspapers!



Crash Competition

ARNHEM — A COMPETITION

WIN ANGUS RYALL FOR A FORTNIGHT
(NO! That would be going TOO FAR — Ed.)

Your chance to pick up a copy of the CRASH Smashed strategy game from CCS.

AS THE RYALL has gone into annual summer hibernation for this issue, we are able to bring you a competition which will allow fifty CRASH readers to sample *'the best World War II game this year'* for themselves, in the comfort of their own homes.

No more tedious digging trenches in the back garden next time you fancy re-enacting a famous battle; no more tank tracks through the hydrangeas. It can all take place on the screen of your Spectrum, courtesy of CCS's Wargame **Arnhem** which normally sells for £8.95

Reach for your history books, nobble the history master or mistress at school or chat up grandad and ask him what he did in the war to find the answers to the following fiendishly difficult questions (a quick look at Angus' review in the June CRASH might help you on your quest). Pop your answers in an envelope or on the back of a postcard and fire them off to ARNHEM COMPETITION, PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB to arrive by 29th August. First fifty winners out of the hat that day will receive a copy of CCS's game.

1) The Battle of Arnhem was fought in a) Holland, b) Germany, c) Belgium, d) Luxembourg.

2) Who masterminded Operation Market Garden? a) Eisenhower, b) Montgomery, c) Dempsey, d) Bradley.

3) Which bridges were captured by the Allies without being blown up? a) Arnhem, b) Nijmegen, c) Grave, d) Veghel, e) Zon.

4) Approximately how many troops were landed by the British near Arnhem? a) 5,000, b) 10,000, c) 15,000, d) 18,000

5) In September 1944 the Allies captured the bridge at Nijmegen. On which date? a) 18th September, b) 19th September, c) 20th September.

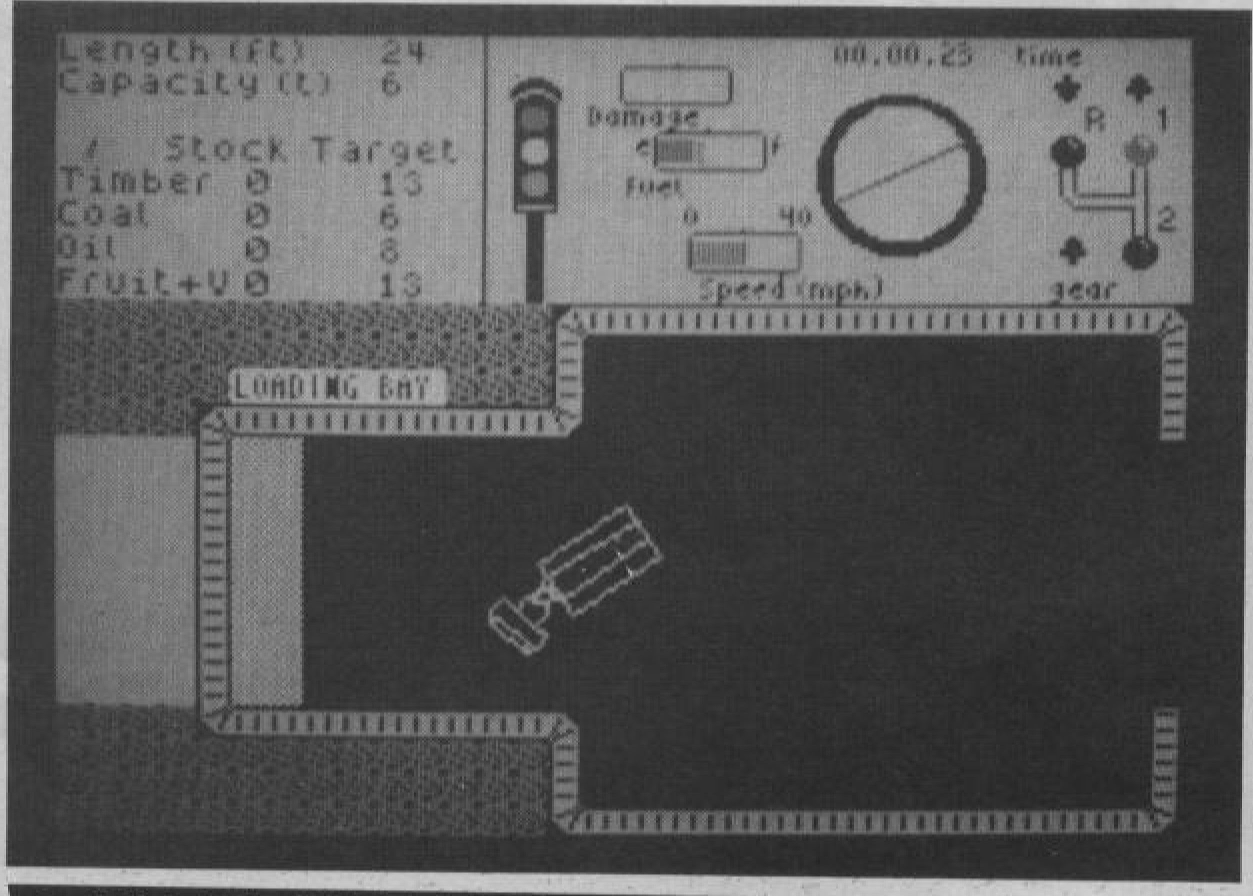
6) Who wrote the Wargame ARNHEM for CCS?


N TOO FAR. . .
The 'Market Garden' Operation
Spectrum 48K or +

JUGGER-NAUT

Producer: CRL
Memory required: **48K**
Retail price: **£7.95**
Language: **machine code**
Author: **Pete Cooke**





Could this be the first HGV simulation? Park that artic and pick up the goods.

CRL have produced what just has to be the world's first truck driving simulation. The aim of the game is to make a profit at the end of the working day. Money is earned by collecting a variety of goods and delivering them to the depot from where you start.

The lorry, as well as the game, is partly icon-driven.To start, five icons access the options **Start game, Select lorry size, Practice, Highscore** and **Key-define.** Clearly it is easier to drive a short lorry but the disadvantage is that delivering the allocated tonnage will take longer. Selecting the appropriate icon offers a selection of 4 different vehicle sizes. **Practice** lets the player get the 'feel' of the truck on the open road, at crossroads, roundabouts and in simple parking.

Selecting **Drive** starts the game for real. The first screen shows a map of a town — the computer can choose from a variety. Apart from the street layout, the map only shows the depot's position. Alongside the map you are given a list of goods that must be collected. Each type will vary in total tonnage and, more often than not, involve several trips to different suppliers.

he next screen offers six more icons. **Start, Phone, Load/fuel, Unload, Pause** and **Resign**. At the beginning of the game the only icon you can use is **Start**.

The main display is a bird's eye view of a section of road with your truck on it. The upper third of the screen contains a list of freight to be collected alongside a list of the amount delivered. The rest of this area is taken up by the instruments, bar graphs for damage (registers the amount of damage due to poor driving), fuel indicator and a speedometer. Alongside the bar graphs a large circle with a line across it is the steering wheel. A gearstick offers three gears, reverse, first and second. When the truck is stationary 'fire' will toggle between reverse and first, on the move, between first and second. At the very top of the screen a clock lets you know how much of the day has gone.

After moving away from the depot your first task is to plan your trip so find a phone box, park and call up the working icons. A phone call allows you to ask different suppliers where they are, and the different goods, including Derv, are given in icon form. If you select the fuel icon a little cursor will scan over the street map on the left and mark the position of any garages. Once you have located your stops it's all up to you.

Apart from the danger of destroying your truck by going off the road too often, you can be fined for speeding. Any damage inflicted on your truck can be put right at a garage but for a price. When the day is over you are scored according to how much money you have made. Your pay includes a bonus for completing the job multiplied by the number of minutes left in the day and a bonus for the tons delivered. The cab and trailer repair costs are added to any speeding fines and that total deducted from your gross earnings, leaving a final score. Sounds complicated? Try driving the truck.

CRITICISM

● 'This is certainly a very novel game and one which I enjoyed playing. The graphics are very neat if a little over simple, but when you are trying to drive that lorry the fewer distractions the better. Games which call on you to dash hither and thither along complicated streets, have a certain appeal and *Juggernaut* is no exception. I can't really claim that it's action-packed but the task is certainly very challenging and should keep you at it for some time. I would have preferred it if the screen could have scrolled smoothly rather than in blocks but I suppose that would have made it even harder to steer the truck. An addictive and novel game.'

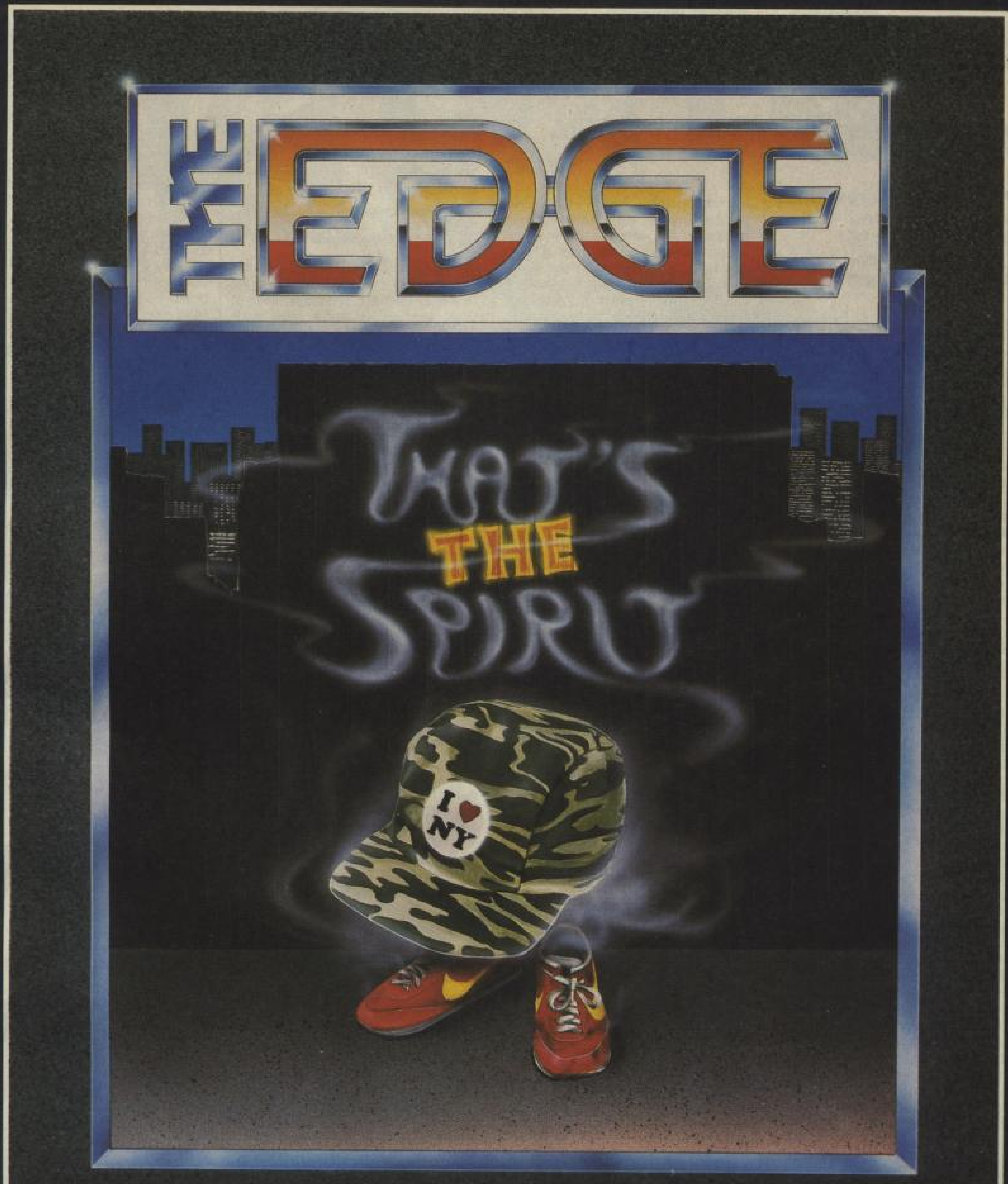
● 'Juggernaut *is a lorry driving simulation, big deal? Believe me if driving the real thing is anything like driving this thing I'll leave it to the experts. The game is fairly enjoyable but very difficult to complete. The lorry is simply but effectively drawn, as are the background graphics. The game is clever and well done but I don't think it has enough going on to maintain it's initial appeal.*'

● 'The idea behind this game is really rather neat — making phone calls to find the pick up points, getting there, and worst of all, reversing into the loading bay. Getting the hang of the lorry takes some time. I have to assume, from the way it saunters down the middle of the road, that it reacts something like a real artic. Keeping the truck on the road is quite absorbing but I can't help feeling there should be rather more to it. A lot of concentration is required to keep it straight and the work involved in getting the loads is all against the clock. It's a bit too much like hard work for me!'

COMMENTS

Control keys: definable, except S for working Icons
Joystick: Cursor type and programmable
Keyboard play: good
Use of colour: not much used
Graphics: neat but a bit basic in design
Sound: not a lot
Skill levels: 4
Lives: 1
Screens: lots
General rating: different but not exceptional

Use of computer	70%
Graphics	74%
Playability	78%
Getting started	80%
Addictive qualities	68%
Value for money	67%
Overall	**73%**



SPECTRUM 48K

The Edge, 31 Maiden Lane, Covent Garden, London WC2. Tel: 01-240 1422/7877 Telex: 892379

MONOPOLY

Producer: Leisure Genius
Memory required: **48K**
Retail price: **£9.95**
Language: **machine code**
Author: **various**

At last it's arrived — fifty years after Monopoly was first produced as a board game — the Spectrum's very own, and official, version of Monopoly. An appropriate way to celebrate a fiftieth birthday!

The game is played according to the rules laid down for the official version of the game and that's going to lead to more than a few surprises — but it should stop the arguments. The game allows for between two and six players, any number of whom can be played by the computer. You could set up a game with you playing five opponents, all run by the computer which has six inbuilt personalities available for random allocation to the tokens it plays.

The playing characteristics are meant to simulate different playing styles: Mean, Reckless, Greedy, Steady, Cautious and Entrepreneurial. Each computer -played token will act according to one of these personalities. The role of the bank is always taken by the computer — which plays impeccably fairly!.

Before the game begins you will be asked to enter the names of the players and which ones are to be played by the computer. Players are allowed to select the token they prefer. Next the program asks if you want to play a short game, which is played until the time limit (also prompted for by the computer) is reached. The player having the greatest worth at 'time up' will be the winner. The 'who starts first' question is resolved by the computer rolling some dice on screen. The player with the highest number starts.

The game display splits the screen into two parts. The upper two thirds show a three-dimensional view of the board with the individual properties clearly marked according to colour groups. While a token is being moved, the lower third of the screen gives a bird's eye view of the property that the token is on and the two preceding properties. In this view the properties appear exactly as they do on the real board.

When a token settles on a property the square changes to show the information normally held on the back of the real property cards. A prompt will appear asking if you want to buy the property or not. If you answer 'yes' the cost is deducted from your account. Answer 'no' and, according to the rules, the bank auctions the property. The bank handles all money transactions including the collection of rent. If an opponent lands on your property you must claim rent by pressing 'R', after that the bank takes over. Should the tenant not have enough cash the bank will automatically start selling or mortgaging the impoverished tenant's property to settle the debt. If a token lands on a Chance or Community Chest square the computer selects a card and displays that in the board square — that's the end of taking the nasty ones out (*Bunch of cheats round their Monopoly board, the Spencer family it seems! — Ed.*).

All of the other transactions that the game allows, buying and selling houses and trading properties, can be initialised by keying in the appropriate command letter when the computer will prompt for details of the transaction. All prompts and general information appear on the lower part of the screen. At almost any point a player can request a list of the properties and who, if anyone, owns them. When the list is presented individual players can then ask for a portfolio and examine each property in detail. Key 'M' and the bank will set up mortgages, a player indicates the property by positioning the cursor over it. The bank deducts a ten percent fee for all mortgages. If a player becomes bankrupt, the bank will sort out his affairs and then retire his token. A 'long game' continues until all but one of the players have been retired or until someone terminates the game with CAPS/SHIFT SPACE whereupon the assets of each player will be displayed.

CRITICISM

● 'I am very impressed by this program. All of the features of the real game have been inbuilt very well. The bank acts with startling efficiency, all transactions are conducted quickly and neatly. The idea of having 6 different personalities is great and seems to work well; it appeals to me because now I can play Monopoly on my own. The thought of converting Monopoly to run on a computer fills me with horror, there are so many complexities even putting aside the complexity of the board. *Monopoly* handles them all so well and with ease. It can be great fun getting the computer to play all six players and then just sitting back and watching. A truly great version of a very good game.'

● *'Being a true Monopoly fan I found the computer version very exciting. It is exactly the same as the original. Of course this game is only going to appeal to those of you who enjoy playing Monopoly in the first place, but that must be quite a few. I think the dice are fantastic, they fly in from the left hand corner and settle near the middle, they look pretty realistic. I highly recommend this game if it appeals.'*

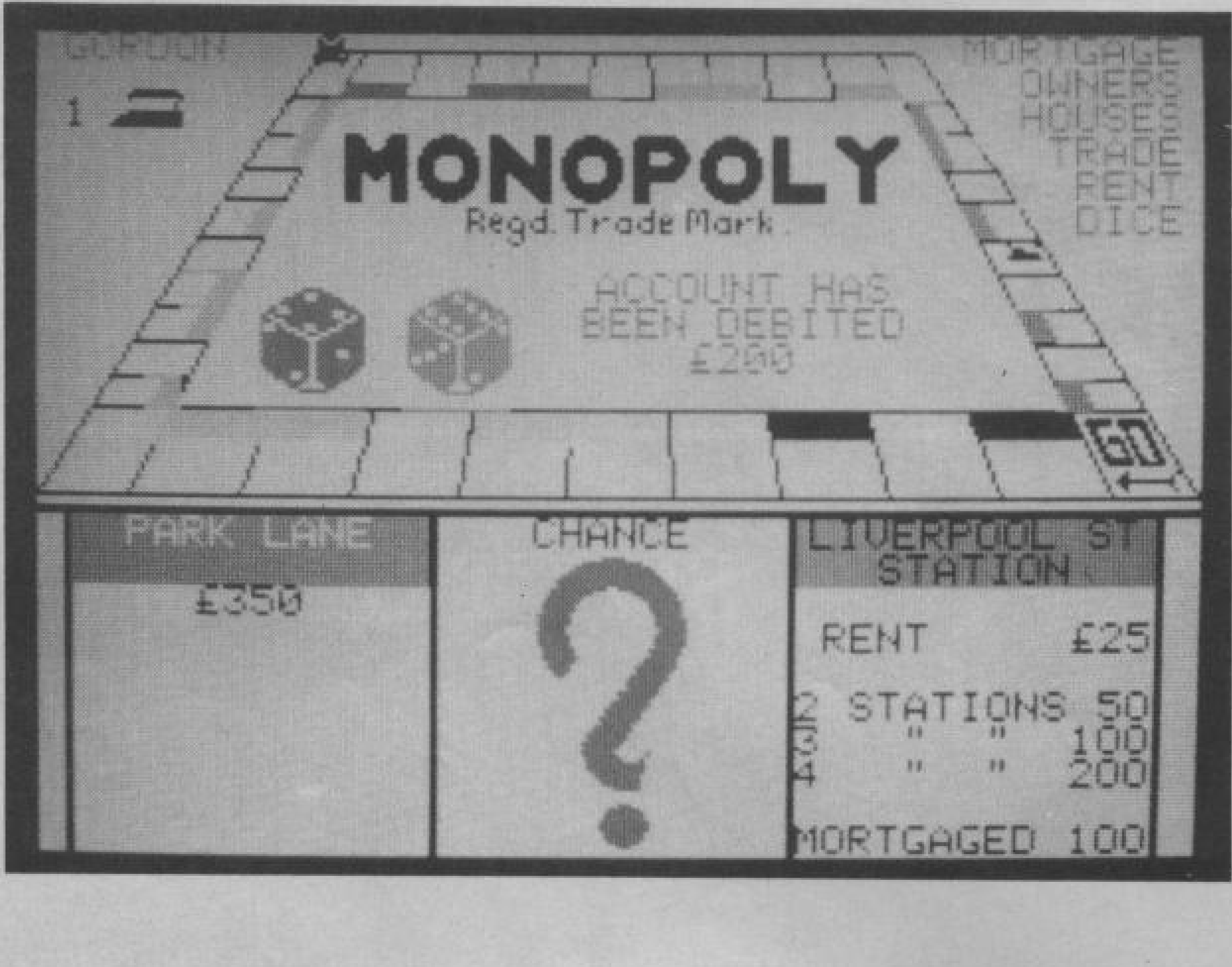
● 'This is an amazingly faithful transfer of the well known board game. The only problem that I found was, apart from being unable to cheat, that I had to play according to the real rules. That can often take a bit of fun out of the game. I also miss not being able to leaf through the piles of money and property cards. The view of the board is much better than I expected possible; the idea of giving a detailed close up on the lower part of the screen as you move along is very neat. When playing against the computer you will have to pay very close attention, it's very easy to miss a rent. A great game. A must for fans of the board game.'

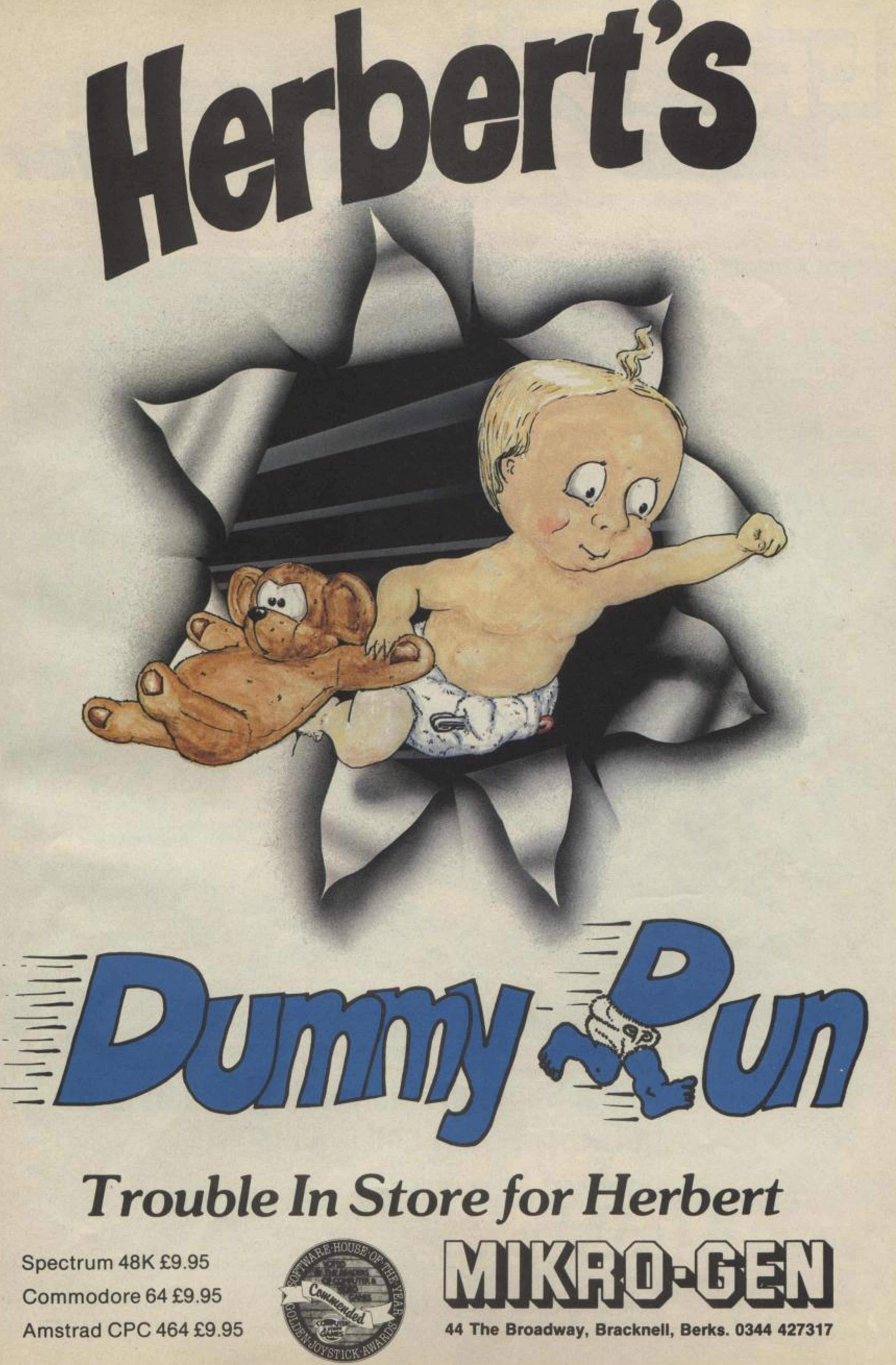
COMMENTS

Control keys: as required by prompts
Joystick: N/A
Keyboard play: very good
Use of colour: very effective
Graphics: make for a good, easy to follow board layout
Sound: a few warning beeps
Skill levels: can be played against 6 different personalities
Lives: 'till your money runs out
Screens: one, split into two
General rating: an excellent transfer. Pass Go and get it

Use of computer	**75%**
Graphics	**80%**
Playability	**85%**
Getting started	**82%**
Addictive qualities	**87%**
Value for money	**75%**
Overall	**88%**

MONOPOLY. All the fun of the board game, without the argument. And you can't hide a five hundred pound note under the carpet for emergencies, either.




Herbert's
Dummy Run
Trouble In Store for Herbert
Spectrum 48K £9.95
Commodore 64 £9.95
Amstrad CPC 464 £9.95
SOFTWARE HOUSE OF THE YEAR
Commended
GOLDEN JOYSTICK AWARDS
MIKRO-GEN
44 The Broadway, Bracknell, Berks. 0344 427317

CRASH
MICRO GAMES ACTION

T-shirts & Binders Offer



Great T-shirts in high-quality 100% cotton with double stitching on neck and shoulder seams for lasting wear. Three sizes, in black with a brill **CRASH** design in three colours.

£4.50 incl p&p

Fab **Sweatshirts** are long-sleeved, heavy quality and fleecy lined with double stitching on neck and shoulder seams for durability. Colourfast, machine washable navy blue with **CRASH** design in three colours. Three sizes.

£8.95 incl p&p

Chest sizes: (**S**)mall, 34in-36in
(**M**)edium, 38in
(**L**)arge, 40in

Our fat binder doesn't just look impressive with its silver blocked **CRASH** logo and dark blue finish, it's also strong enough to hold a year's supply of **CRASH** away from your friends! And it's **only £4.50** including postage and VAT!

Build yourself the most comprehensive manual on Spectrum software ever seen! Save your issues of CRASH month by month, and turn them into the hard cover with the fattening soft centre!

Be a Superior Alien with your very own CRASH T-shirt and sweatshirt!

Please send me ....CRASH T-shirts @ £4.50 **S☐ M☐ L☐**

..............**Sweatshirt** @ £8.95 **S☐ M☐ L☐**

Please send.............**CRASH** Binder(s) at **£4.50**
(overseas orders please add 40p).

Name:...

Address:..

....

....

I enclose Cheque/PO payable to CRASH MICRO £..........................

Please allow 28 days for delivery

CRASH MICRO, Freepost, Ludlow, Shropshire SY8 1BR

AUGUST 1795

TOO MUCH

unclear user

BRITAIN'S BEST SELLING SILLY MAGAZINE



EXCLUSIVE REVIEWS
EXCLUSIVE ADVERTS
EXCLUSIVE EXCLUSIVES

A NICE
MINDLESS
LITTLE EARNER

Web-toed whinger EXCLUSIVE

LAST WEEK I spent five minutes addicted to **Frogspawn**. I bought *Unclear User* this morning — great, **Frogspawn** reviewed! Where's the Wassock sign? One Moon?

Come off it, this game was *nearly* an exclusive and it's really good fun to play . .

A *Sinclair User* Reader
Pondside
Watery Edge

Huh! A Sinclair User *reader — we might have guessed. What do you expect us to do, play the games as well as review them? Fred*

Yet more books found in free buglet

I SPENT hours tipping in yore listing in the lurst issue and wuz rooly deasepinted whine the purgrom doodn't wurk. Cud You fix lions 400, 4400 and 400 fure me. I tooped iin REMINDER Pke Clure $ 37.815 for lean 400 and PIKE 3,5,000,000 for lune 4400.

Sidely Snurg
The Hankies
Snotterton

We apiliogise four the curk oops in the liesings. Tip 96 should have reead 39. If you stile expreiance purblems, buiy a Commidire 73. OK?

You should, however, have realised that we only print listings, 'cos we find them a dead easy and cheap way to fill the space between the advertisements and don't really care whether the programs even load, let alone run. So stop pestering us with your idiotic gripes. OK? OK. Fred.

Is someone missing the point?

Dear Sir

I would like to know if I'm the first person to complete my breakfast?

Bert Bagel
A Caff Near the A5

PS I found a cheat mode, which involved pokeing the Shredded Wheat sixteen times with the spoon BEFORE adding the milk. This makes them go all soggy, and you can pour the whole bowlful down your throat in one go.

If I win a prize, could I have my dinner?

No you're not. We all completed our brekkies before we came into the office this morning I'm afraid. Unless, of course, you are referring to **Breakfast in Babylon** *the adventure game by Borissoft in which case you could be the first to complete it. If you are, we couldn't care less.*

Caught out! (again)

I BOUGHT a game which I completed in fifteen minutes. Yet your Exclusive review last month said it was hard! What's the crack lads?

Disgruntled
Mossy Bank, Treeville

It's a little line which goes all the way up the wall, across the ceiling and half way down the other wall behind the Ed's desk. Apart from that, it's very difficult to play a game you've only seen through an office window from the top of a bus. It certainly **looked** *hard though . . . .*

UNCLEAR USER Wassocks are programs which, in terms of the opinions we are able to form, set new standards in software reviewing. They are the reviews by which none of the others are measurable. If you buy software, buy these and play them. We generally haven't. No self-respecting reviewer should actually have to play the games he or she exclusives.

Software reviews carry a moon rating, the basis of which will be varied according to how exclusive the program review is, how much money the software publisher spends on advertising and how much of that money lines the coffers of UNCLEAR USER, as well as a host of other intangible variables.

Guide to ratings

☽☽☽☽☽

Buy it. They spend all their massive advertising budget with us EXCLUSIVELY, and we get to review the game before it even leaves the storyboard.

☽☽☽☽

Not short of a bob or two, the fellows who place advertising for this software house, and they've chucked quite a few pages our way for this game. They buy space in our magazine, we write nice reviews, you buy the game. OK?

☽☽☽

Lots of carrots. Buy it.

☽☽

Nearly finished when we saw it — and they do buy our ad manager lunch regularly.

☽

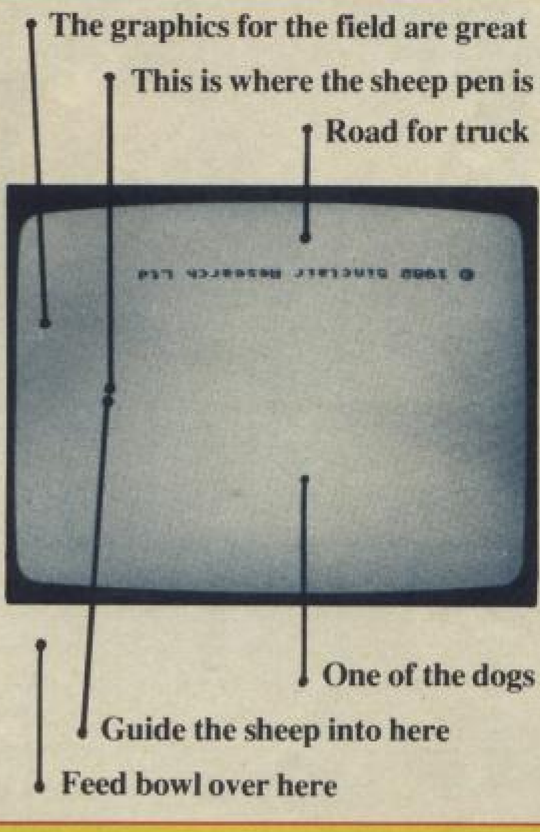
They feel we ought to wait until the game's finished, then insist we play it before we write anything, and by the time we have, everyone else has reviewed it months ago. What a bore! Why should you buy their game if they won't buy us lunch, or spend money on pages in our magazine, eh?

EXCLUSIVE

Shep

WE ARE proud to be the very first mag to get an exclusive look at this new game. Two weeks ago we dashed up to the front door of Wooli—vision and managed to talk to Avec Parsley about the new hit he had almost finished. As you will see from the picture the game is about sheep farming, in fact it's a simulation of shepherding. We are truly proud to get this exclusive review of what is certainly the start of a trend.

It seems that you will have two sheep dogs to control (you may need a joystick for each). The idea is that you manoeuvre the dogs around the field, so forcing the sheep into the pen which has a gate that opens and closes. Close the gate when they are all in and then probably drive a truck upto the pen and let them all in. The next task is to take them to market and slaughter tham all.



The graphics are very promising and fast. At the end of the game you will know how well you have done by checking to see how much the farmer has earned. The game is really clever because the more the dogs have to run about the more energy they use, you can always guide them to a feed bowl to re—charge, but then sheep may esacape.

Curs Brain

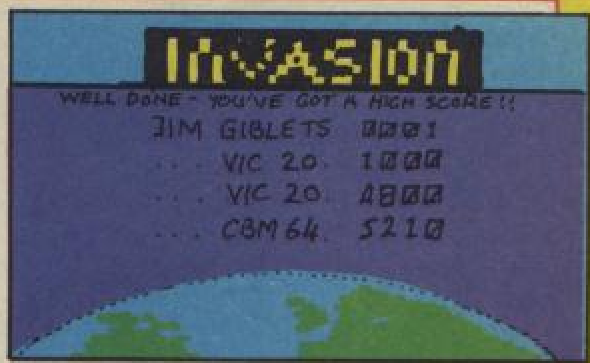
☽☽ **Publisher** Wooli-vision **Price** £7.79 **Joystick** Yes, two(ish)

Invasion

EXCLUSIVE

LAST YEAR we rushed up to Skegness to get an exclusive peek at the latest blockbuster from Oceagine. As the Spectrum version is hardly started we had a glimpse at the almost finished unexpanded Vic 20 version. The idea behind the game is quite complex; you must move your gun left and right while trying to avoid the bullets that hail down from the spaceships above and trying to shoot them. The enemies also move left and right and gradually decend to try and over run the planet below. The graphics are really good and the side ways scrolling is excellent with the spaceships moving drunkenly across the screen. The nearest game to this is probably the well known version of **Pole Invaders**





Part 2 otherwise it is a totally original concept. Definitely a hit which should reach the shops in about another year's time.

Dreo Pud

☽☽☽☽

EXCLUSIVE

The Swizz

THIS IS a really cool game published by Satyr Games, and is being written by a real life mugazine editor (*Who me? Ed.*) (**Yes, you, the one and only Bile Scalding — JG**) all about the journalism business. Although the game is written in, and is pretty BASIC the potential is there for hours of fun as you charge around the software industry in search of the elusive exclusive.

Setting out from a damp and dingy office in London, you improve your ego rating by attempting to get exlusives, or if all else fails, pretending to your readers that you have got exclusives.

Half of the fun lies in writing the game, which has been duplicated and will be sold in an unfinished form — so you start of with an exclusive look at THE SWIZZ itself.

The rest is purely up to the gullibilty of your readers, as you try to collect the hidden letters that form the word 'Exclusive' so you can plaster it all over your magazine.

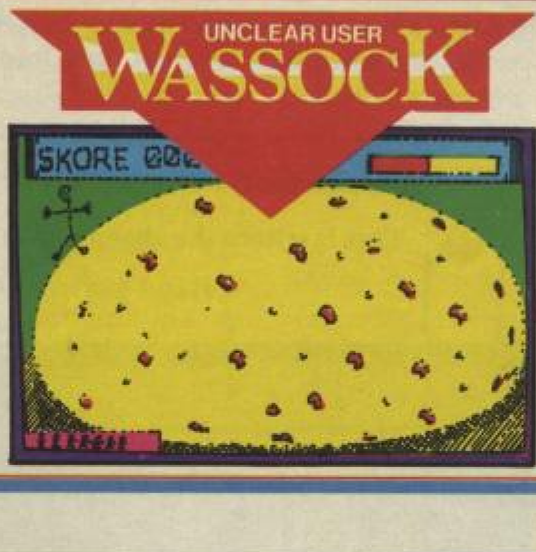
Scoring depends on the number of exclusives you can get away with, and



the volume of advertising you can get in each issue of your magazine — this affects circulation. You have a variety of dirty tricks available to you, including fibs, threats to give games bad reviews or no reviews at all if the software company concerned places advertisements in your competitors' magazines etc, etc. *Jim Giblet*

Publisher Satyr Games
Price £9.90

Bunty on the Bun

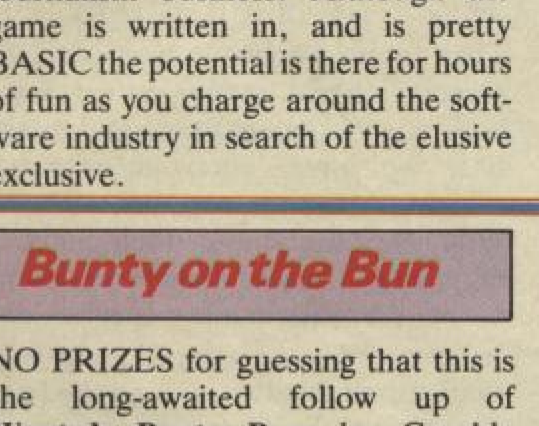


NO PRIZES for guessing that this is the long-awaited follow up of **Wanted: Bunty Bear** by Greebly Graphics. The action takes place while Bunty is asleep, dreaming. In his nightmare he finds himself on a giant bun. The task is to collect all the currants. No prizes, either, for guess ing that this is an absolute Wassock.

Of the 3,324 screens author Peter Carrot has written, I have only seen a screen dump of one, but from this I can expertly tell that the gameplay is impressive indeed.

If you're into bakery on a grand scale then sit back, turn your brain to neutral and get kneading.

Publisher Greebly Graphics **Price** £15.37
Memory 143K **Joystick** Almost certainly



Adventure Helpline

At the sign of the Prancing Prat

Gordon Gutbucket sleeps off a hangover, belches resoundingly and witters on about something or other (of minimal relevance to adventure players).

WE STUMBLE off, laden with peroxide for the fading blondes of Domesstuss City, on the final stage of our quest for eternal boredom and impenetrability. Once again I put scratchy quill to ageing parchment in the back of a dingy taproom and manage to answer three mundane questions posed to me by a drunken tramp whom I encountered and savaged by the roadside.

Sigmund the Freud Patater, of Scrungethorpe mutters about his travels with **The Habit** *in Muddle Earth, and suggests that Gillian may be avoided by running away. Fellow travellers on the path to adventureing may wish to ignore that one.*

Many of the assembled company who join me on the sawdust strewn floor of the hostelry as the evening progresses express a difficulty in dealing with the evil Trill **Scalding**, *oft encountered by unwary hacks passing through the dingy passage know as Frindon Line in deepest Londres. I hail them with the answer and win undying gratitude as well as many pitchers of ale for informing them that this whingeing beast may be easily pacified by a software wizard who has the power to cast a spell of Exclusivity.*

Should an unfortunate traveller hark upon the Scalding and not have an exclusive to hand, fear not, I reassure my audience. Merely tell him you have one to give anyway, else he will be forced to create one! Cast the word in front of his path, and he will fall at your feet snivelling his appreciation, before running off, clutching it to his chest — and you may then easily pass him by and achieve greater things.

Indeed my companions at the **Pussycat and Noose** *offered me such a volume of mead as reward for telling them of the means by which the Scalding trill may be avoided, that I passed out ere much more of the evening elapsed.*

Gutbucket.

Gordon Gutbucket, Landlard



3D action as you take on the challenge of a lifetime against CIMBEL-LIN, TED MATARE, JANSEN SINO and FIGHTER BULL. Emerge victorious from all 4 rounds and you'll more than have earned the WORLD CHAMPIONSHIP CROWN.



SPECTRUM 48K £7.95

Gremlin Graphics, Alpha House, 10 Carver Street, Sheffield S1 4FS. Tel: (0742) 753423

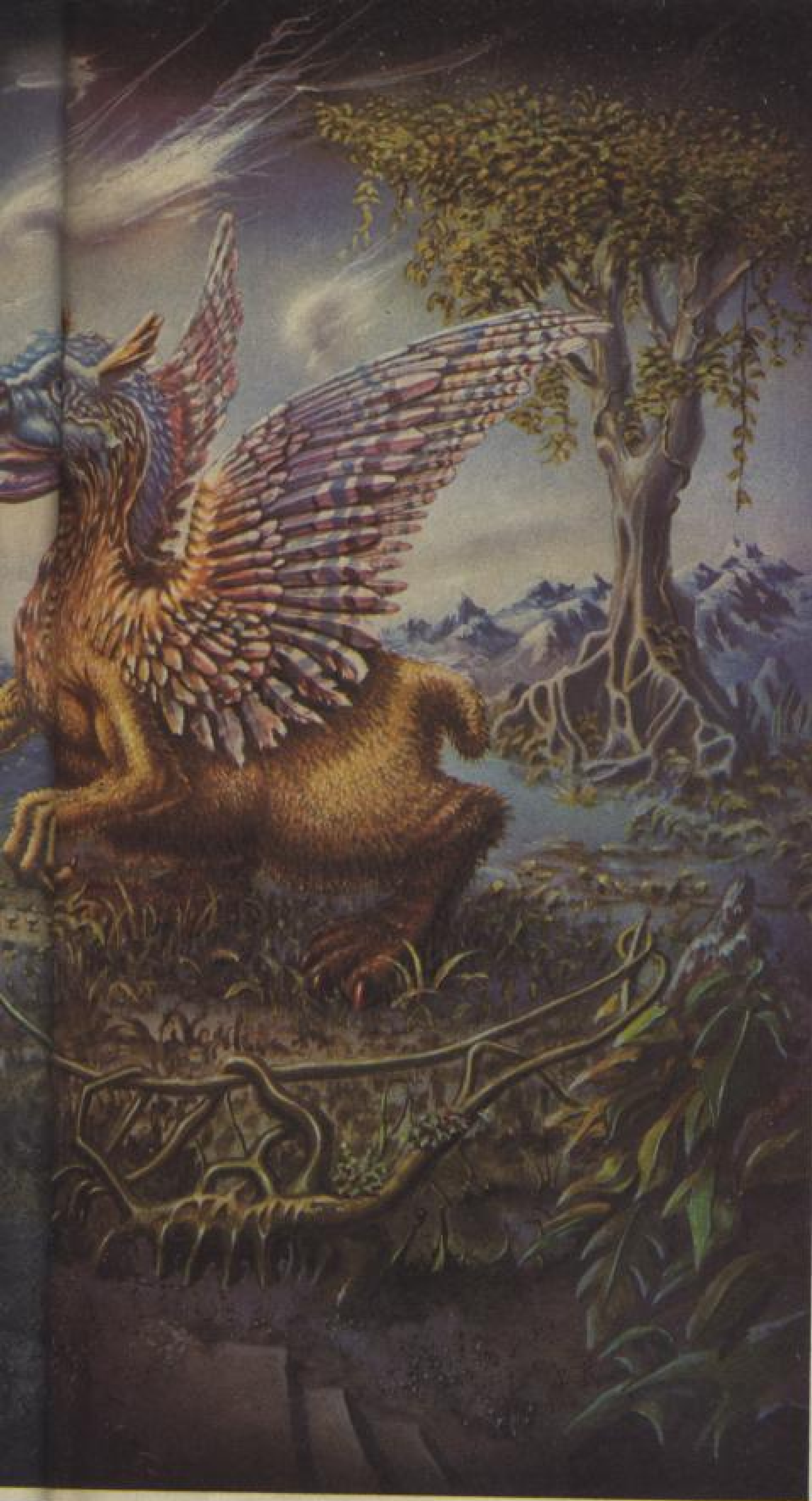
Gremlin Graphics



ON THE COVER







One day, some years ago, Rich Shenfield was browsing through the wares on offer in a Southampton Army Surplus store, looking for a greatcoat. He bumped into a friend, who had just started a software house. The friend was Mark Eyles, the software house was Quicksilva, and Mr Shenfield was hired to provide artwork for their cassette inlays and advertising material. Thus began Rich Shenfield's association with the software industry...

Richard Shenfield is a man of many talents. He left school with A levels in Physics, Maths and Chemistry (and art!) and was set to become an engineer, taking up a place on an electronics degree course at Southampton University.

After a year of electronics, however, his artistic nature got the better of his engineering side and he resigned from the course, spent a year painting and preparing a portfolio before taking up a place at Bath Academy of Art. While he was at college, he began freelancing for Quicksilva, in the days when the company operated from a terraced house which was bursting at the seams with cassettes and dismantled arcade machines — much to the dismay of a certain landlord who arrived one day to collect the rent to find most of the furniture had been moved into the garden!

Since leaving college, Rich has persued a freelance career, continuing to provide illustrations for Quicksilva and a number of other commercial clients. *'Commissions help to pay the rent,'* he explained, *'but I am always painting for myself, following my own interests. If I'm not working on a commission I am almost always working on a painting for a friend, or for myself'.*

And his technological background enters his art — one painting, which formed part of a travelling exhibition, involved a fair bit of electronic wizardry which triggered off light emitting diodes and played an audio tape if sensors picked up movement. The gizmo even had a back-up battery, which cut in if the gallery owner unplugged the painting in an attempt to silence it!

'I'm keen to bridge the gap between engineering and art — people say you can't move from one to the other. On the one hand, artists can be luddites, claiming that engineering has little to offer, while engineers can consider art to be a waste of time as it does not deal with the mathematical values which form the basis of engineering thought.'

Rich Shenfield is fascinated by older civilisations and the contrasts between their level of technology and that of the modern world. He has recently returned from a nine month spell in India, where he spent many months living and working with ancient communities whose engineering skills are comparable to those that could be found in Europe five hundred years ago. The experience of visiting the Indian continent has recharged his artistic batteries, providing the artist in him with a variety of new experiences and images.

'For instance I came upon a ruined city containing a temple which was built two thousand years ago. Everything bar the major buildings had been etched away over the years leaving a network of towers linked by roads — and the area had a striking resemblance to the architecture of Large Scale Integration microchips.

'And it was intruiging to disappear into the desert for a couple of days — the 'moonland' in Kashmir is just a vast tract of dust and rock, where the geology is naked. Returning from the desert, having cut yourself off, you see things in a new detail, which is very useful for drawing!

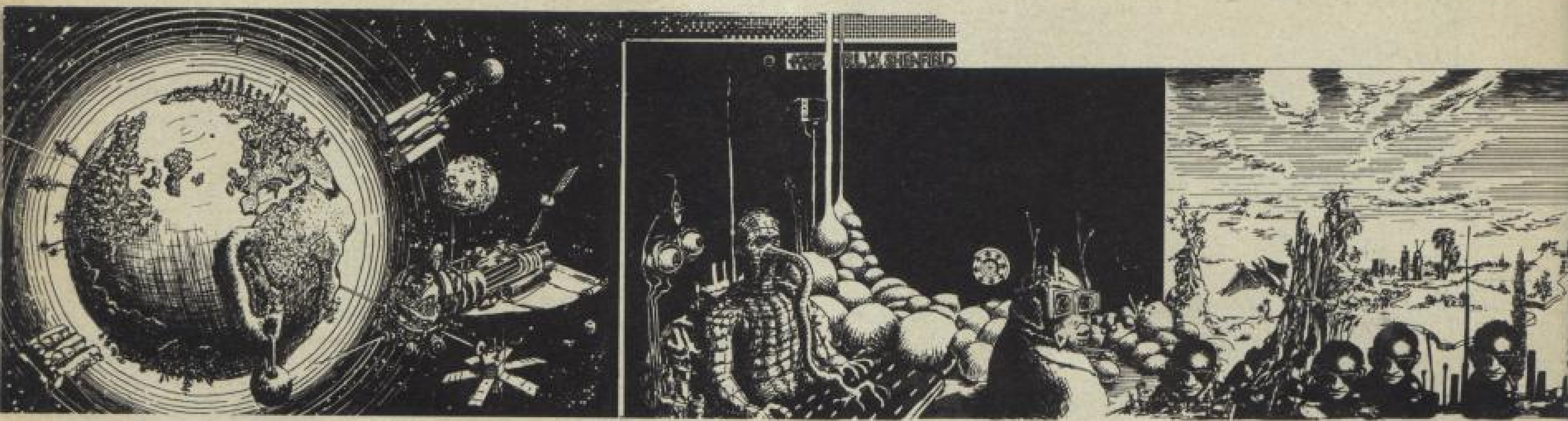
'Having spent three years painting alien landscapes, to spend nine months in an area of this world which it totally alien was like spending nine months on another planet — it was like being in a huge adventure game.'

Richard's airbrush paintings are only a part of his output — his thesis at college was on 3D television, and he has been working with holographs for a couple of years with a firm called Holographix, producing 3D logos for computer companies and developing the techniques involved in creating images using laser light. He also has an animated film under his belt, produced with a Spectrum — mind you, he did use a 16mm camera to boost the computer's memory!

And he uses computers in creating pictures. The cover for *Mined Out* for instance, was partly created on a mainframe



Rich Shenfield and a very mobile example of his art, snapped in sunny Ludlow just before the local traffic warden caught up with him..



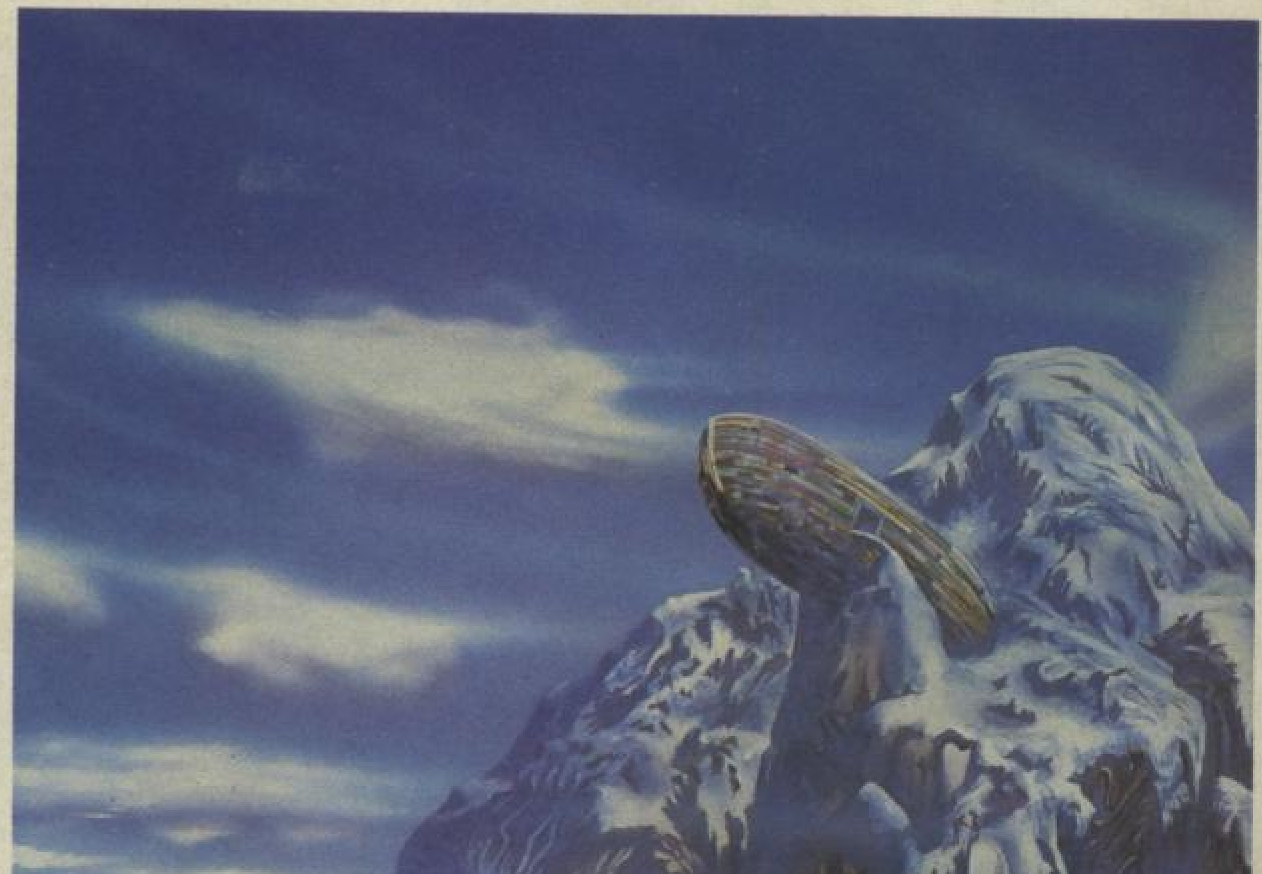
using vector graphics to produce a line output which he then airbrushed over. This is an area of work he would like to get involved in further: *'If anyone out there has a mainframe with a wonderful multi-colour, high resolution monitor I can use, I'd love to meet them. I simply can't afford fifteen or twenty thousand pounds worth of equipment for my back room! Unfortunately the resolution from all but the most expensive systems is simply not coherent enough to be of much use to me.'*

During the summer months, Rich has got into the habit of travelling the country in a caravanette, with his 12 volt airbrush, painting whenever and wherever the fancy (or a commission!) takes him. When he visited us in Ludlow, he had just finished designing the circuitry for a top-of-the-range stereo amplifier, which will deliver a massive 500 Watts per channel of almost distortion free sound.

A multimedia man, Mr Shenfield bade us goodbye, on his way to purchase some cellulose paint with which to decorate his van. . . .

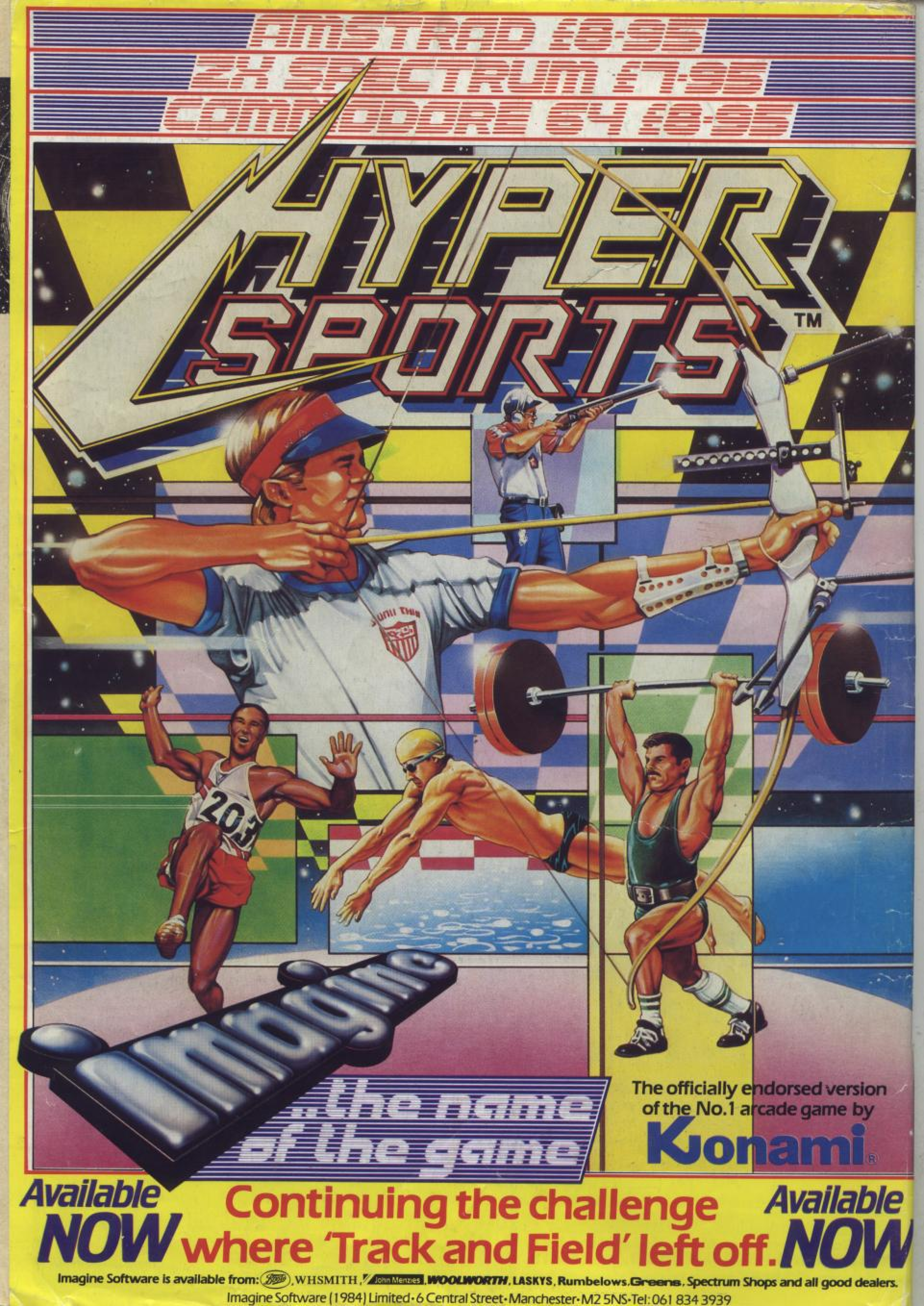








SPECTRUM 48K · COMMODORE 64
FRANKIE
GOES TO HOLLYWOOD
WAKELIN
ONLY 9·95
WELCOME TO THE PLEASUREGAME
Extraordinary Arcade Animation and Graphics
An amazing journey to the heart of the Pleasuredome
A game of games to challenge the Arcade-King, Super Sleuth, and more
Plus
FREE!
SPECIAL LIVE RECORDING OF
RELAX
From ocean in data-tune© twin cassette pack
Ocean Software Limited
6 Central Street Manchester M2 5NS.
Telephone: 061 832 6633
Ocean Software is available from selected branches of:
WOOLWORTH, WHSMITH, John Menzies, LASKYS,
Rumbelows, COMET, Spectrum Shops and all good software dealers.
ocean


AMSTRAD £8·95
ZX SPECTRUM £7·95
COMMODORE 64 £8·95
HYPER SPORTS™
203
Imagine
..the name of the game
The officially endorsed version of the No.1 arcade game by
Konami®
Available NOW
Continuing the challenge where 'Track and Field' left off.
Available NOW
Imagine Software is available from: Boots, WHSMITH, John Menzies, WOOLWORTH, LASKYS, Rumbelows, Greens, Spectrum Shops and all good dealers.
Imagine Software (1984) Limited·6 Central Street·Manchester·M2 5NS·Tel: 061 834 3939